



SEQUENCE LISTING

<110> BREMER, RYAN
IBRAHIM, PRABHA
KUMAR, ABHINAV
MANDIYAN, VALSAN
MILBURN, MICHAEL V.

<120> CRYSTAL STRUCTURE OF PIM-1 KINASE

<130> 039363/0703

<140> 10/664,421
<141> 2003-09-16

<150> 60/412,341
<151> 2002-09-20

<150> 60/411,398
<151> 2002-09-16

<160> 173

<170> PatentIn Ver. 3.3

<210> 1
<211> 313
<212> PRT
<213> Homo sapiens

<400> 1
Met Leu Leu Ser Lys Ile Asn Ser Leu Ala His Leu Arg Ala Ala Pro
1 5 10 15
Cys Asn Asp Leu His Ala Thr Lys Leu Ala Pro Gly Lys Glu Lys Glu
20 25 30
Pro Leu Glu Ser Gln Tyr Gln Val Gly Pro Leu Leu Gly Ser Gly Gly
35 40 45
Phe Gly Ser Val Tyr Ser Gly Ile Arg Val Ser Asp Asn Leu Pro Val
50 55 60
Ala Ile Lys His Val Glu Lys Asp Arg Ile Ser Asp Trp Gly Glu Leu
65 70 75 80
Pro Asn Gly Thr Arg Val Pro Met Glu Val Val Leu Leu Lys Lys Val
85 90 95
Ser Ser Gly Phe Ser Gly Val Ile Arg Leu Leu Asp Trp Phe Glu Arg
100 105 110
Pro Asp Ser Phe Val Leu Ile Leu Glu Arg Pro Glu Pro Val Gln Asp
115 120 125
Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu Gln Glu Glu Leu Ala
130 135 140

Arg Ser Phe Phe Trp Gln Val Leu Glu Ala Val Arg His Cys His Asn
 145 150 155 160

Cys Gly Val Leu His Arg Asp Ile Lys Asp Glu Asn Ile Leu Ile Asp .
 165 170 175

Leu Asn Arg Gly Glu Leu Lys Leu Ile Asp Phe Gly Ser Gly Ala Leu
 180 185 190

Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr Arg Val Tyr Ser
 195 200 205

Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly Arg Ser Ala Ala
 210 215 220

Val Trp Ser Leu Gly Ile Leu Leu Tyr Asp Met Val Cys Gly Asp Ile
 225 230 235 240

Pro Phe Glu His Asp Glu Glu Ile Ile Arg Gly Gln Val Phe Phe Arg
 245 250 255

Gln Arg Val Ser Ser Glu Cys Gln His Leu Ile Arg Trp Cys Leu Ala
 260 265 270

Leu Arg Pro Ser Asp Arg Pro Thr Phe Glu Glu Ile Gln Asn His Pro
 275 280 285

Trp Met Gln Asp Val Leu Leu Pro Gln Glu Thr Ala Glu Ile His Leu
 290 295 300

His Ser Leu Ser Pro Gly Pro Ser Lys
 305 310

<210> 2

<211> 313

<212> PRT

<213> Mus musculus

<400> 2

Met Leu Leu Ser Lys Ile Asn Ser Leu Ala His Leu Arg Ala Arg Pro
 1 5 10 15

Cys Asn Asp Leu His Ala Thr Lys Leu Ala Pro Gly Lys Glu Lys Glu
 20 25 30

Pro Leu Glu Ser Gln Tyr Gln Val Gly Pro Leu Leu Gly Ser Gly Gly
 35 40 45

Phe Gly Ser Val Tyr Ser Gly Ile Arg Val Ala Asp Asn Leu Pro Val
 50 55 60

Ala Ile Lys His Val Glu Lys Asp Arg Ile Ser Asp Trp Gly Glu Leu
 65 70 75 80

Pro Asn Gly Thr Arg Val Pro Met Glu Val Val Leu Leu Lys Lys Val
 85 90 95

Ser Ser Asp Phe Ser Gly Val Ile Arg Leu Leu Asp Trp Phe Glu Arg
 100 105 110

Pro Asp Ser Phe Val Leu Ile Leu Glu Arg Pro Glu Pro Val Gln Asp
 115 120 125

Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu Gln Glu Asp Leu Ala
 130 135 140

Arg Gly Phe Phe Trp Gln Val Leu Glu Ala Val Arg His Cys His Asn
 145 150 155 160

Cys Gly Val Leu His Arg Asp Ile Lys Asp Glu Asn Ile Leu Ile Asp
 165 170 175

Leu Ser Arg Gly Glu Ile Lys Leu Ile Asp Phe Gly Ser Gly Ala Leu
 180 185 190

Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr Arg Val Tyr Ser
 195 200 205

Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly Arg Ser Ala Ala
 210 215 220

Val Trp Ser Leu Gly Ile Leu Leu Tyr Asp Met Val Cys Gly Asp Ile
 225 230 235 240

Pro Phe Glu His Asp Glu Glu Ile Ile Lys Gly Gln Val Phe Phe Arg
 245 250 255

Gln Thr Val Ser Ser Glu Cys Gln His Leu Ile Lys Trp Cys Leu Ser
 260 265 270

Leu Arg Pro Ser Asp Arg Pro Ser Phe Glu Glu Ile Arg Asn His Pro
 275 280 285

Trp Met Gln Gly Asp Leu Leu Pro Gln Ala Ala Ser Glu Ile His Leu
 290 295 300

His Ser Leu Ser Pro Gly Ser Ser Lys
 305 310

<210> 3
 <211> 323
 <212> PRT
 <213> Homo sapiens

<400> 3
 Met Leu Thr Lys Pro Leu Gln Gly Pro Pro Ala Pro Pro Gly Thr Pro
 1 5 10 15

Thr Pro Pro Pro Gly Gly Lys Asp Arg Glu Ala Phe Glu Ala Glu Tyr
 20 25 30

Arg Leu Gly Pro Leu Leu Gly Lys Gly Gly Phe Gly Thr Val Phe Ala
 35 40 45

Gly His Arg Leu Thr Asp Arg Leu Gln Val Ala Ile Lys Val Ile Pro
 50 55 60

Arg Asn Arg Val Leu Gly Trp Ser Pro Leu Ser Asp Ser Val Thr Cys
 65 70 75 80

Pro Leu Glu Val Ala Leu Leu Trp Lys Val Gly Ala Gly Gly His
 85 90 95

Pro Gly Val Ile Arg Leu Leu Asp Trp Phe Glu Thr Gln Glu Gly Phe
 100 105 110

Met Leu Val Leu Glu Arg Pro Leu Pro Ala Gln Asp Leu Phe Asp Tyr
 115 120 125

Ile Thr Glu Lys Gly Pro Leu Gly Glu Gly Pro Ser Arg Cys Phe Phe
 130 135 140

Gly Gln Val Val Ala Ala Ile Gln His Cys His Ser Arg Gly Val Val
 145 150 155 160

His Arg Asp Ile Lys Asp Glu Asn Ile Leu Ile Asp Leu Arg Arg Gly
 165 170 175

Cys Ala Lys Leu Ile Asp Phe Gly Ser Gly Ala Leu Leu His Asp Glu
 180 185 190

Pro Tyr Thr Asp Phe Asp Gly Thr Arg Val Tyr Ser Pro Pro Glu Trp
 195 200 205

Ile Ser Arg His Gln Tyr His Ala Leu Pro Ala Thr Val Trp Ser Leu
 210 215 220

Gly Ile Leu Leu Tyr Asp Met Val Cys Gly Asp Ile Pro Phe Glu Arg
 225 230 235 240

Asp Gln Glu Ile Leu Glu Ala Glu Leu His Phe Pro Ala His Val Ser
 245 250 255

Pro Asp Cys Cys Ala Leu Ile Arg Arg Cys Leu Ala Pro Lys Pro Ser
 260 265 270

Ser Arg Pro Ser Leu Glu Glu Ile Leu Leu Asp Pro Trp Met Gln Thr
 275 280 285

Pro Ala Glu Asp Val Thr Pro Gln Pro Leu Gln Arg Arg Pro Cys Pro
 290 295 300

Phe Gly Leu Val Leu Ala Thr Leu Ser Leu Ala Trp Pro Gly Leu Ala
 305 310 315 320

Pro Asn Gly

<210> 4

<211> 311

<212> PRT

<213> Mus musculus

<400> 4

Met	Leu	Thr	Lys	Pro	Leu	Gln	Gly	His	Pro	Ser	Pro	Pro	Val	Thr	Pro
1					5				10				15		

Thr	Gln	Pro	Pro	Gly	Gly	Lys	Asp	Arg	Ala	Ala	Phe	Glu	Ala	Glu	Tyr
						20		25				30			

Arg	Leu	Gly	Pro	Leu	Leu	Gly	Lys	Gly	Gly	Phe	Gly	Thr	Val	Phe	Ala
							35	40				45			

Gly	His	Arg	Val	Thr	Asp	Arg	Arg	Gln	Val	Ala	Ile	Lys	Val	Ile	Ser
						50		55			60				

Arg	Asn	Arg	Val	Leu	Gly	Trp	Ser	Thr	Val	Ser	Asp	Ser	Val	Thr	Cys
						65		70		75		80			

Pro	Leu	Glu	Val	Ala	Leu	Leu	Trp	Lys	Val	Gly	Glu	Gly	Asn	Gly	His
							85		90			95			

Pro	Gly	Val	Ile	Arg	Leu	Leu	Asp	Trp	Phe	Glu	Thr	Pro	Glu	Gly	Phe
							100		105			110			

Met	Leu	Val	Leu	Glu	Arg	Pro	Met	Pro	Ala	Gln	Asp	Leu	Phe	Asp	Tyr
							115		120			125			

Ile	Thr	Glu	Lys	Gly	Pro	Leu	Gly	Glu	Ser	Cys	Ser	Arg	Ser	Phe	Phe
							130		135			140			

Thr	Gln	Val	Val	Ala	Ala	Val	Gln	His	Cys	His	Ala	Arg	Gly	Val	Val
							145		150		155		160		

His	Arg	Asp	Ile	Lys	Asp	Glu	Asn	Ile	Leu	Ile	Asp	Leu	Cys	Arg	Gly
							165			170		175			

Ser	Ile	Lys	Leu	Ile	Asp	Phe	Gly	Ser	Gly	Ala	Leu	Leu	His	Asp	Glu
							180		185			190			

Pro	Tyr	Thr	Asp	Phe	Asp	Gly	Thr	Arg	Val	Tyr	Ser	Pro	Pro	Glu	Trp
							195		200			205			

Ile	Ser	Arg	His	Gln	Tyr	His	Ala	Leu	Pro	Ala	Thr	Val	Trp	Ser	Leu
							210		215			220			

Gly	Val	Leu	Leu	Tyr	Asp	Met	Val	Cys	Gly	Asp	Ile	Pro	Phe	Glu	Arg
							225		230			235		240	

Asp	Gln	Glu	Ile	Leu	Glu	Ala	Glu	Leu	His	Phe	Pro	Ala	His	Val	Ser
							245		250			255			

Pro	Asp	Cys	Cys	Ala	Leu	Ile	Arg	Arg	Cys	Leu	Ala	Pro	Lys	Pro	Cys
							260		265			270			

Ser Arg Pro Ser Leu Glu Glu Ile Leu Leu Asp Pro Trp Met Gln Ser
 275 280 285
 Pro Ala Glu Glu Lys Pro Ile Asn Ser Ser Lys Gly Ser Pro Thr Pro
 290 295 300
 Leu Pro Trp Ser Leu Leu Pro
 305 310

<210> 5
 <211> 296
 <212> PRT
 <213> Homo sapiens

<400> 5
 Ala Asp Lys Glu Ser Phe Glu Lys Ala Tyr Gln Val Gly Ala Val Leu
 1 5 10 15

Gly Ser Gly Gly Phe Gly Thr Val Tyr Ala Gly Ser Arg Ile Ala Asp
 20 25 30

Gly Leu Pro Val Ala Val Lys His Val Val Lys Glu Arg Val Thr Glu
 35 40 45

Trp Gly Ser Leu Gly Gly Ala Thr Val Pro Leu Glu Val Val Leu Leu
 50 55 60

Arg Lys Val Gly Ala Ala Gly Gly Ala Arg Gly Val Ile Arg Leu Leu
 65 70 75 80

Asp Trp Phe Glu Arg Pro Asp Gly Phe Leu Leu Val Leu Glu Arg Pro
 85 90 95

Glu Pro Ala Gln Asp Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu
 100 105 110

Asp Glu Pro Leu Ala Arg Arg Phe Phe Ala Gln Val Leu Ala Ala Val
 115 120 125

Arg His Cys His Ser Cys Gly Val Val His Arg Asp Ile Lys Asp Glu
 130 135 140

Asn Leu Leu Val Asp Leu Arg Ser Gly Glu Leu Lys Leu Ile Asp Phe
 145 150 155 160

Gly Ser Gly Ala Leu Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly
 165 170 175

Thr Arg Val Tyr Ser Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His
 180 185 190

Gly Arg Ser Ala Thr Val Trp Ser Leu Gly Val Leu Leu Tyr Asp Met
 195 200 205

Val Cys Gly Asp Ile Pro Phe Glu Gln Asp Glu Glu Ile Leu Arg Gly
 210 215 220

Arg Leu Leu Phe Arg Arg Arg Val Ser Pro Glu Cys Gln Gln Leu Ile
 225 230 235 240

Arg Trp Cys Leu Ser Leu Arg Pro Ser Glu Arg Pro Ser Leu Asp Gln
 245 250 255

Ile Ala Ala His Pro Trp Met Leu Gly Ala Asp Gly Gly Ala Pro Glu
 260 265 270

Ser Cys Asp Leu Arg Leu Cys Thr Leu Asp Pro Asp Asp Val Ala Ser
 275 280 285

Thr Thr Ser Ser Ser Glu Ser Leu
 290 295

<210> 6
 <211> 325
 <212> PRT
 <213> Mus musculus

<400> 6
 Met Leu Leu Ser Lys Phe Gly Ser Leu Ala His Leu Cys Gly Pro Gly
 1 5 10 15

Gly Val Asp His Leu Pro Val Lys Ile Leu Gln Pro Ala Lys Ala Asp
 20 25 30

Lys Glu Ser Phe Glu Lys Val Tyr Gln Val Gly Ala Val Leu Gly Ser
 35 40 45

Gly Gly Phe Gly Thr Val Tyr Ala Gly Ser Arg Ile Ala Asp Gly Leu
 50 55 60

Pro Val Ala Val Lys His Val Val Lys Glu Arg Val Thr Glu Trp Gly
 65 70 75 80

Ser Leu Gly Gly Val Ala Val Pro Leu Glu Val Val Leu Leu Arg Lys
 85 90 95

Val Gly Ala Ala Gly Gly Ala Arg Gly Val Ile Arg Leu Leu Asp Trp
 100 105 110

Phe Glu Arg Pro Asp Gly Phe Leu Leu Val Leu Glu Arg Pro Glu Pro
 115 120 125

Ala Gln Asp Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu Asp Glu
 130 135 140

Pro Leu Ala Arg Arg Phe Phe Ala Gln Val Leu Ala Ala Val Arg His
 145 150 155 160

Cys His Asn Cys Gly Val Val His Arg Asp Ile Lys Asp Glu Asn Leu
 165 170 175

Leu Val Asp Leu Arg Ser Gly Glu Leu Lys Leu Ile Asp Phe Gly Ser
 180 185 190

Gly Ala Val Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr Arg
 195 200 205
 Val Tyr Ser Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly Arg
 210 215 220
 Ser Ala Thr Val Trp Ser Leu Gly Val Leu Leu Tyr Asp Met Val Cys
 225 230 235 240
 Gly Asp Ile Pro Phe Glu Gln Asp Glu Glu Ile Leu Arg Gly Arg Leu
 245 250 255
 Phe Phe Arg Arg Val Ser Pro Glu Cys Gln Gln Leu Ile Glu Trp
 260 265 270
 Cys Leu Ser Leu Arg Pro Ser Glu Arg Pro Ser Leu Asp Lys Leu Cys
 275 280 285
 His Pro Trp Met Leu Gly Thr Glu Gly Ser Val Pro Glu Asn Cys Asp
 290 295 300
 Leu Arg Leu Cys Ala Leu Asp Thr Asp Asp Gly Ala Ser Thr Thr Ser
 305 310 315 320
 Ser Ser Glu Ser Leu
 325

<210> 7
 <211> 323
 <212> PRT
 <213> Coturnix coturnix

<400> 7
 Met Leu Leu Ser Lys Phe Gly Ser Leu Ala His Ile Cys Ser Pro Ala
 1 5 10 15
 Ser Met Asp His Leu Pro Val Lys Ile Leu Pro Pro Val Lys Val Glu
 20 25 30
 Lys Glu Pro Phe Asp Lys Val Tyr Gln Val Gly Ser Val Leu Gly Ser
 35 40 45
 Gly Gly Phe Gly Thr Val Tyr Ala Gly Ser Arg Thr Ala Asp Gly Leu
 50 55 60
 Pro Val Ala Val Lys His Val Val Lys Glu Arg Val Thr Glu Trp Gly
 65 70 75 80
 Thr Ile Gly Gly Val Met Val Pro Leu Glu Ile Val Leu Leu Lys Lys
 85 90 95
 Val Gly Ser Gly Phe Arg Gly Val Ile Lys Leu Leu Asp Trp Tyr Glu
 100 105 110
 Arg Pro Asp Gly Phe Leu Ile Val Met Glu Arg Pro Glu Leu Val Lys
 115 120 125

Asp Leu Phe Asp Phe Ile Thr Glu Lys Gly Ala Leu Asp Glu Asp Thr
 130 135 140
 Ala Arg Gly Phe Phe Arg Gln Val Leu Glu Ala Val Arg His Cys Tyr
 145 150 155 160
 Gly Cys Gly Val Val His Arg Asp Ile Lys Asp Glu Asn Leu Leu Val
 165 170 175
 Asp Leu Arg Thr Gly Glu Leu Lys Leu Ile Asp Phe Gly Ser Gly Ala
 180 185 190
 Leu Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr Arg Val Tyr
 195 200 205
 Ser Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly Arg Ser Ala
 210 215 220
 Thr Val Trp Ser Leu Gly Val Leu Leu Tyr Asp Met Val Cys Gly Asp
 225 230 235 240
 Ile Pro Phe Glu Gln Asp Glu Glu Ile Leu Arg Gly Arg Leu Tyr Phe
 245 250 255
 Arg Arg Arg Ile Ser Pro Glu Cys Gln Gln Leu Ile Lys Trp Cys Leu
 260 265 270
 Ser Leu Arg Pro Ser Asp Arg Pro Thr Leu Glu Gln Ile Phe Asp His
 275 280 285
 Gln Trp Met His Lys Ser Glu Val Val Lys Ser Glu Asp Cys Asp Ile
 290 295 300
 Arg Leu Arg Thr Leu Asp Thr Asp Val Ser Ser Thr Ser Ser Ser Asn
 305 310 315 320
 Glu Ser Leu

<210> 8
 <211> 323
 <212> PRT
 <213> Xenopus laevis

<400> 8
 Met Leu Leu Ser Lys Phe Gly Ser Leu Ala His Ile Cys Asn Pro Ser
 1 5 10 15
 Asn Met Glu His Leu Pro Val Lys Ile Leu Gln Pro Val Lys Val Asp
 20 25 30
 Lys Glu Pro Phe Glu Lys Val Tyr Gln Val Gly Ser Val Val Ala Ser
 35 40 45
 Gly Gly Phe Gly Thr Val Tyr Ser Asp Ser Arg Ile Ala Asp Gly Gln
 50 55 60

Pro Val Ala Val Lys His Val Ala Lys Glu Arg Val Thr Glu Trp Gly
 65 70 75 80
 Thr Leu Asn Gly Val Met Val Pro Leu Glu Ile Val Leu Leu Lys Lys
 85 90 95
 Val Pro Thr Ala Phe Arg Gly Val Ile Asn Leu Leu Asp Trp Tyr Glu
 100 105 110
 Arg Pro Asp Ala Phe Leu Ile Val Met Glu Arg Pro Glu Pro Val Lys
 115 120 125
 Asp Leu Phe Asp Tyr Ile Thr Glu Lys Gly Pro Leu Asp Glu Asp Thr
 130 135 140
 Ala Arg Gly Phe Phe Arg Gln Val Leu Glu Ala Val Arg His Cys Tyr
 145 150 155 160
 Asn Cys Gly Val Val His Arg Asp Ile Lys Asp Glu Asn Leu Leu Val
 165 170 175
 Asp Thr Arg Asn Gly Glu Leu Lys Leu Ile Asp Phe Gly Ser Gly Ala
 180 185 190
 Leu Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr Arg Val Tyr
 195 200 205
 Ser Pro Pro Glu Trp Val Arg Tyr His Arg Tyr His Gly Arg Ser Ala
 210 215 220
 Thr Val Trp Ser Leu Gly Val Leu Leu Tyr Asp Met Val Tyr Gly Asp
 225 230 235 240
 Ile Pro Phe Glu Gln Asp Glu Glu Ile Val Arg Val Arg Leu Cys Phe
 245 250 255
 Arg Arg Arg Ile Ser Thr Glu Cys Gln Gln Leu Ile Lys Trp Cys Leu
 260 265 270
 Ser Leu Arg Pro Ser Asp Arg Pro Thr Leu Glu Gln Ile Phe Asp His
 275 280 285
 Pro Trp Met Cys Lys Cys Asp Leu Val Lys Ser Glu Asp Cys Asp Leu
 290 295 300
 Arg Leu Arg Thr Ile Asp Asn Asp Ser Ser Ser Thr Ser Ser Ser Asn
 305 310 315 320
 Glu Ser Leu

<210> 9
 <211> 310
 <212> PRT
 <213> Danio rerio

<400> 9
 Met Leu Asp Lys Arg Ile Val Asp Val Arg Leu Asp Gln Leu Glu Ile
 1 5 10 15
 Leu Lys Ala Lys Asn Gly Lys Glu His Phe Glu Lys Gln Tyr Thr Met
 20 25 30
 Gly Asn Leu Leu Gly Ser Gly Phe Gly Ser Val Tyr Ser Gly His
 35 40 45
 Arg Ile Ser Asp Gly Gln Lys Val Ala Ile Lys Gln Ile Ser Arg Asp
 50 55 60
 Arg Ile Gln Gln Trp Ser Lys Met Pro Gly Glu Val Asn Pro Val Pro
 65 70 75 80
 Asn Glu Ile Ala Leu Leu Gln Ser Leu Gly Gly Ser Gly Ser Val
 85 90 95
 Pro Gly His Arg Gly Ile Ile Arg Met Leu Asp Trp Phe Glu Ile Pro
 100 105 110
 Gly Gln Glu Tyr Leu Ile Val Phe Glu Lys Pro Gln His Cys Gln Asp
 115 120 125
 Leu Phe Asp Phe Ile Thr Glu Arg Gly Arg Leu Asp Glu Ser Leu Ala
 130 135 140
 Arg Arg Phe Leu Lys Gln Val Ile Glu Ala Val Gln Phe Cys His Ser
 145 150 155 160
 Lys Gly Ile Val His Arg Asp Ile Lys Asp Glu Asn Ile Leu Val Asp
 165 170 175
 Thr Arg Thr Gly Asp Ile Lys Val Ile Asp Phe Gly Ser Gly Ala Thr
 180 185 190
 Leu Lys Asp Ser Met Tyr Thr Asp Phe Glu Gly Thr Arg Val Tyr Ser
 195 200 205
 Pro Pro Glu Trp Ile Leu Tyr His Lys Tyr His Ala Leu Pro Leu Thr
 210 215 220
 Val Trp Ser Leu Gly Val Leu Leu Tyr Asp Met Val Cys Gly Asp Ile
 225 230 235 240
 Pro Phe Glu Gln Asp Thr Asp Ile Val Lys Ala Lys Pro Ser Phe Asn
 245 250 255
 Lys Arg Ile Ser Asn Asp Cys Arg Ser Leu Ile Cys Ser Cys Leu Ser
 260 265 270
 Tyr Asn Pro Gly Asp Arg Pro Ser Leu Glu Gln Ile Leu Gln His Pro
 275 280 285
 Trp Met Met Glu Ser Ser Val Asp Asn Gly Asp Leu Gln Glu Glu Ser
 290 295 300

Lys Ile Lys Pro Ser Leu
305 310

<210> 10
<211> 322
<212> PRT
<213> Caenorhabditis elegans

<400> 10
Met Lys Lys Leu Ala Ser Leu Gln Phe Phe Asn Leu Lys Leu Leu Leu
1 5 10 15
Asn Gly Glu Ser Ser Arg Gly Phe Ser Lys Phe Lys Lys Asn Tyr Lys
20 25 30
Leu Lys Ala Glu Leu Gly Arg Gly Phe Gly Val Val Tyr Arg Ala
35 40 45
Val Arg Thr Cys Asp Asn Ala Leu Val Ala Val Lys Phe Ile Glu Arg
50 55 60
Ser Asn Val Lys Glu Trp Ala Arg Ile Asn Gly Glu Gln Val Pro Met
65 70 75 80
Glu Ile Cys Met Leu Ala Lys Cys Ser Lys Val Arg Gly Val Ile Arg
85 90 95
Leu Leu Asp Trp Tyr Ser Ile Pro Glu Gly Phe Leu Ile Val Met Glu
100 105 110
Arg Pro Tyr Pro Cys Ile Asp Met Phe Asp Phe Ile Lys Gly Gln Gly
115 120 125
Lys Ile Ser Glu Asp Met Ala Arg Phe Leu Phe Arg Gln Ile Ala Val
130 135 140
Thr Val His Glu Cys Val Gln Asn Arg Val Leu His Arg Asp Leu Lys
145 150 155 160
Asp Glu Asn Ile Val Ile Asp Leu Val Thr Gly Ser Thr Lys Leu Ile
165 170 175
Asp Phe Gly Ala Ala Thr Val Leu Arg Arg Ser Gln Tyr Ser Asp Phe
180 185 190
Gln Gly Thr Arg Leu Tyr Cys Pro Pro Glu Trp Phe Leu His Ser Leu
195 200 205
Tyr Leu Gly Arg Glu Ala Ala Val Trp Ser Leu Gly Val Leu Leu Tyr
210 215 220
Asn Ser Leu Asn Gly Arg Leu Pro Phe Arg Asn Glu Lys Asp Ile Cys
225 230 235 240
Thr Ala His Leu Leu Gly Pro Leu Pro Phe Phe Val Pro Val Ser Ala
245 250 255

Glu Val Lys Asp Leu Ile Ser Lys Cys Leu Thr Phe Asp Pro Phe Gln
 260 265 270

Arg Cys Ser Leu Glu Ala Ile Leu Asn His Pro Trp Val Lys Gln Gln
 275 280 285

Thr Leu Ser Trp Asp Ala Leu Thr Lys Asn Lys Val Gln Lys Lys Thr
 290 295 300

Ser Glu Ser Ser Asp Asp His His Ser Glu Thr Leu Gly Asp His Ser
 305 310 315 320

Glu Thr

<210> 11

<211> 323

<212> PRT

<213> *Caenorhabditis elegans*

<400> 11

Met Ile Lys Arg Lys Leu Gln Asp Leu Ala Val Cys Cys Ser Tyr Gln
 1 5 10 15

Val Asp Phe Leu His Glu Lys Lys His Ser Val Lys Glu Phe Lys Arg
 20 25 30

Lys Tyr Glu Val Leu Asp Glu Ile Gly Arg Gly Phe Gly Ile Val
 35 40 45

Tyr Glu Ala Thr Thr Arg Gln Asp Gly Gln Gln Pro Val Ala Val Lys
 50 55 60

Phe Val Gln His Lys His Val Arg Ser Trp Thr Met Thr Cys Arg Gln
 65 70 75 80

Leu Ile Pro Ser Glu Val Cys His Leu Glu Thr Cys Glu Asp Ile Pro
 85 90 95

Gly Val Ile Lys Ile Leu Asp Trp Phe Ala Asn Ser Lys Gly Phe Leu
 100 105 110

Ile Val Met Glu Arg Pro Ala Asn Cys Met Asp Leu Phe Asp Met Val
 115 120 125

Ser Val His Gly Pro Leu Asn Glu Asp Met Gly Lys Phe Ile Phe Lys
 130 135 140

Gln Val Ile Thr Thr Val Phe Asn Met Tyr Ser Lys His Gly Leu Leu
 145 150 155 160

His Arg Asp Ile Lys Asp Glu Asn Leu Ile Val Asn Met Asn Thr Gly
 165 170 175

Glu Val Lys Leu Val Asp Phe Gly Ala Thr Ala Tyr Ala Glu Lys Ala
 180 185 190

Thr Lys Lys Glu Phe Gln Gly Thr Arg Ser Tyr Cys Pro Pro Glu Trp
 195 200 205
 Phe Arg Asp Gln Leu Tyr Leu Pro Leu Glu Ala Thr Ser Trp Ser Leu
 210 215 220
 Gly Val Leu Leu Phe Ile Leu Leu Thr Gly Lys Leu Pro Phe Arg Asn
 225 230 235 240
 Glu Ile Gln Ile Cys Leu Gly Asn Val Lys Phe Pro Pro Asp Leu Ser
 245 250 255
 Lys Glu Val Cys Gln Leu Val Lys Ser Cys Leu Thr Thr Ser Thr Ser
 260 265 270
 Ala Arg Ala Ser Leu Ala Gln Ile Ala Ala His Pro Trp Met Glu Thr
 275 280 285
 Asp Lys Pro Phe Phe Gly Gly Asp Leu Thr Phe Glu Glu Ala Leu Met
 290 295 300
 Glu Ile Lys Asn Pro Pro Val Val Ile Glu Asp Lys Glu Ala Glu Glu
 305 310 315 320
 Glu Asp Asn

<210> 12
 <211> 298
 <212> PRT
 <213> Oryctolagus cuniculus .

 <400> 12
 Thr Arg Asp Ala Ala Leu Pro Gly Ser His Ser Thr His Gly Phe Tyr
 1 5 10 15
 Glu Asn Tyr Glu Pro Lys Glu Ile Leu Gly Arg Gly Val Ser Ser Val
 20 25 30
 Val Arg Arg Cys Ile His Lys Pro Thr Cys Lys Glu Tyr Ala Val Lys
 35 40 45
 Ile Ile Asp Val Thr Gly Gly Ser Phe Ser Ala Glu Glu Val Gln
 50 55 60
 Glu Leu Arg Glu Ala Thr Leu Lys Glu Val Asp Ile Leu Arg Lys Val
 65 70 75 80
 Ser Gly His Pro Asn Ile Ile Gln Leu Lys Asp Thr Tyr Glu Thr Asn
 85 90 95
 Thr Phe Phe Phe Leu Val Phe Asp Leu Met Lys Lys Gly Glu Leu Phe
 100 105 110
 Asp Tyr Leu Thr Glu Lys Val Thr Leu Ser Glu Lys Glu Thr Arg Lys
 115 120 125

Ile Met Arg Ala Leu Leu Glu Val Ile Cys Ala Leu His Lys Leu Asn
 130 135 140

Ile Val His Arg Asp Leu Lys Pro Glu Asn Ile Leu Leu Asp Asp Asp
 145 150 155 160

Met Asn Ile Lys Leu Thr Asp Phe Gly Phe Ser Cys Gln Leu Asp Pro
 165 170 175

Gly Glu Lys Leu Arg Glu Val Cys Gly Thr Pro Ser Tyr Leu Ala Pro
 180 185 190

Glu Ile Ile Glu Cys Ser Met Asn Asp Asn His Pro Gly Tyr Gly Lys
 195 200 205

Glu Val Asp Met Trp Ser Thr Gly Val Ile Met Tyr Thr Leu Leu Ala
 210 215 220

Gly Ser Pro Pro Phe Trp His Arg Lys Gln Met Leu Met Leu Arg Met
 225 230 235 240

Ile Met Ser Gly Asn Tyr Gln Phe Gly Ser Pro Glu Trp Asp Asp Tyr
 245 250 255

Ser Asp Thr Val Lys Asp Leu Val Ser Arg Phe Leu Val Val Gln Pro
 260 265 270

Gln Lys Arg Tyr Thr Ala Glu Glu Ala Leu Ala His Pro Phe Phe Gln
 275 280 285

Gln Tyr Val Val Glu Glu Val Arg His Phe
 290 295

<210> 13
<211> 332
<212> PRT
<213> Homo sapiens

<400> 13
Met Pro Gly Ala Val Glu Gly Pro Arg Trp Lys Gln Ala Glu Asp Ile
 1 5 10 15

Arg Asp Ile Tyr Asp Phe Arg Asp Val Leu Gly Thr Gly Ala Phe Ser
 20 25 30

Glu Val Ile Leu Ala Glu Asp Lys Arg Thr Gln Lys Leu Val Ala Ile
 35 40 45

Lys Cys Ile Ala Lys Lys Ala Leu Glu Gly Lys Glu Gly Ser Met Glu
 50 55 60

Asn Glu Ile Ala Val Leu His Lys Ile Lys His Pro Asn Ile Val Ala
 65 70 75 80

Leu Asp Asp Ile Tyr Glu Ser Gly Gly His Leu Tyr Leu Ile Met Gln
 85 90 95

Leu Val Ser Gly Gly Glu Leu Phe Asp Arg Ile Val Glu Lys Gly Phe
 100 105 110

Tyr Thr Glu Arg Asp Ala Ser Arg Leu Ile Phe Gln Val Leu Asp Ala
 115 120 125

Val Lys Tyr Leu His Asp Leu Gly Ile Val His Arg Asp Leu Lys Pro
 130 135 140

Glu Asn Leu Leu Tyr Tyr Ser Leu Asp Glu Asp Ser Lys Ile Met Ile
 145 150 155 160

Ser Asp Phe Gly Leu Ser Lys Met Glu Asp Pro Gly Ser Val Leu Ser
 165 170 175

Thr Ala Cys Gly Thr Pro Gly Tyr Val Ala Pro Glu Val Leu Ala Gln
 180 185 190

Lys Pro Tyr Ser Lys Ala Val Asp Cys Trp Ser Ile Gly Val Ile Ala
 195 200 205

Tyr Ile Leu Leu Cys Gly Tyr Pro Pro Phe Tyr Asp Glu Asn Asp Ala
 210 215 220

Lys Leu Phe Glu Gln Ile Leu Lys Ala Glu Tyr Glu Phe Asp Ser Pro
 225 230 235 240

Tyr Trp Asp Asp Ile Ser Asp Ser Ala Lys Asp Phe Ile Arg His Leu
 245 250 255

Met Glu Lys Asp Pro Glu Lys Arg Phe Thr Cys Glu Gln Ala Leu Gln
 260 265 270

His Pro Trp Ile Ala Gly Asp Thr Ala Leu Asp Lys Asn Ile His Gln
 275 280 285

Ser Val Ser Glu Gln Ile Lys Lys Asn Phe Ala Lys Ser Lys Trp Lys
 290 295 300

Gln Ala Phe Asn Ala Thr Ala Val Val Arg His Met Arg Lys Leu Gln
 305 310 315 320

Leu Gly His Gln Pro Gly Gly Thr Gly Thr Asp Ser
 325 330

<210> 14
 <211> 298
 <212> PRT
 <213> Homo sapiens

<400> 14
 Met Glu Asn Phe Gln Lys Val Glu Lys Ile Gly Glu Gly Thr Tyr Gly
 1 5 10 15

Val Val Tyr Lys Ala Arg Asn Lys Leu Thr Gly Glu Val Val Ala Leu
 20 25 30

Lys Lys Ile Arg Leu Asp Thr Glu Thr Glu Gly Val Pro Ser Thr Ala
 35 40 45
 Ile Arg Glu Ile Ser Leu Leu Lys Glu Leu Asn His Pro Asn Ile Val
 50 55 60
 Lys Leu Leu Asp Val Ile His Thr Glu Asn Lys Leu Tyr Leu Val Phe
 65 70 75 80
 Glu Phe Leu His Gln Asp Leu Lys Lys Phe Met Asp Ala Ser Ala Leu
 85 90 95
 Thr Gly Ile Pro Leu Pro Leu Ile Lys Ser Tyr Leu Phe Gln Leu Leu
 100 105 110
 Gln Gly Leu Ala Phe Cys His Ser His Arg Val Leu His Arg Asp Leu
 115 120 125
 Lys Pro Gln Asn Leu Leu Ile Asn Thr Glu Gly Ala Ile Lys Leu Ala
 130 135 140
 Asp Phe Gly Leu Ala Arg Ala Phe Gly Val Pro Val Arg Thr Tyr Thr
 145 150 155 160
 His Glu Val Val Thr Leu Trp Tyr Arg Ala Pro Glu Ile Leu Leu Gly
 165 170 175
 Cys Lys Tyr Tyr Ser Thr Ala Val Asp Ile Trp Ser Leu Gly Cys Ile
 180 185 190
 Phe Ala Glu Met Val Thr Arg Arg Ala Leu Phe Pro Gly Asp Ser Glu
 195 200 205
 Ile Asp Gln Leu Phe Arg Ile Phe Arg Thr Leu Gly Thr Pro Asp Glu
 210 215 220
 Val Val Trp Pro Gly Val Thr Ser Met Pro Asp Tyr Lys Pro Ser Phe
 225 230 235 240
 Pro Lys Trp Ala Arg Gln Asp Phe Ser Lys Val Val Pro Pro Leu Asp
 245 250 255
 Glu Asp Gly Arg Ser Leu Leu Ser Gln Met Leu His Tyr Asp Pro Asn
 260 265 270
 Lys Arg Ile Ser Ala Lys Ala Ala Leu Ala His Pro Phe Phe Gln Asp
 275 280 285
 Val Thr Lys Pro Val Pro His Leu Arg Leu
 290 295

<210> 15
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 15
 Met Glu Lys Asp Gly Leu Cys Arg Ala Asp Gln Gln Tyr Glu Cys Val
 1 5 10 15
 Ala Glu Ile Gly Glu Gly Ala Tyr Gly Lys Val Phe Lys Ala Arg Asp
 20 25 30
 Leu Lys Asn Gly Gly Arg Phe Val Ala Leu Lys Arg Val Arg Val Gln
 35 40 45
 Thr Gly Glu Glu Gly Met Pro Leu Ser Thr Ile Arg Glu Val Ala Val
 50 55 60
 Leu Arg His Leu Glu Thr Phe Glu His Pro Asn Val Val Arg Leu Phe
 65 70 75 80
 Asp Val Cys Thr Val Ser Arg Thr Asp Arg Glu Thr Lys Leu Thr Leu
 85 90 95
 Val Phe Glu His Val Asp Gln Asp Leu Thr Thr Tyr Leu Asp Lys Val
 100 105 110
 Pro Glu Pro Gly Val Pro Thr Glu Thr Ile Lys Asp Met Met Phe Gln
 115 120 125
 Leu Leu Arg Gly Leu Asp Phe Leu His Ser His Arg Val Val His Arg
 130 135 140
 Asp Leu Lys Pro Gln Asn Ile Leu Val Thr Ser Ser Gly Gln Ile Lys
 145 150 155 160
 Leu Ala Asp Phe Gly Leu Ala Arg Ile Tyr Ser Phe Gln Met Ala Leu
 165 170 175
 Thr Ser Val Val Val Thr Leu Trp Tyr Arg Ala Pro Glu Val Leu Leu
 180 185 190
 Gln Ser Ser Tyr Ala Thr Pro Val Asp Leu Trp Ser Val Gly Cys Ile
 195 200 205
 Phe Ala Glu Met Phe Arg Arg Lys Pro Leu Phe Arg Gly Ser Ser Asp
 210 215 220
 Val Asp Gln Leu Gly Lys Ile Leu Asp Val Ile Gly Leu Pro Gly Glu
 225 230 235 240
 Glu Asp Trp Pro Arg Asp Val Ala Leu Pro Arg Gln Ala Phe His Ser
 245 250 255
 Lys Ser Ala Gln Pro Ile Glu Lys Phe Val Thr Asp Ile Asp Glu Leu
 260 265 270
 Gly Lys Asp Leu Leu Lys Cys Leu Thr Phe Asn Pro Ala Lys Arg
 275 280 285
 Ile Ser Ala Tyr Ser Ala Leu Ser His Pro Tyr Phe Gln Asp Leu Glu
 290 295 300

Arg Cys Lys Glu Asn Leu Asp Ser His Leu Pro Pro Ser Gln Asn Thr
 305 310 315 320
 Ser Glu Leu Asn Thr Ala
 325

<210> 16
 <211> 367
 <212> PRT
 <213> Homo sapiens

<400> 16
 Met Ser Ser Pro Pro Pro Ala Arg Ser Gly Phe Tyr Arg Gln Glu Val
 1 5 10 15

Thr Lys Thr Ala Trp Glu Val Arg Ala Val Tyr Arg Asp Leu Gln Pro
 20 25 30

Val Gly Ser Gly Ala Tyr Gly Ala Val Cys Ser Ala Val Asp Gly Arg
 35 40 45

Thr Gly Ala Lys Val Ala Ile Lys Lys Leu Tyr Arg Pro Phe Gln Ser
 50 55 60

Glu Leu Phe Ala Lys Arg Ala Tyr Arg Glu Leu Arg Leu Leu Lys His
 65 70 75 80

Met Arg His Glu Asn Val Ile Gly Leu Leu Asp Val Phe Thr Pro Asp
 85 90 95

Glu Thr Leu Asp Asp Phe Thr Asp Phe Tyr Leu Val Met Pro Phe Met
 100 105 110

Gly Thr Asp Leu Gly Lys Leu Met Lys His Glu Lys Leu Gly Glu Asp
 115 120 125

Arg Ile Gln Phe Leu Val Tyr Gln Met Leu Lys Gly Leu Arg Tyr Ile
 130 135 140

His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gly Asn Leu Ala
 145 150 155 160

Val Asn Glu Asp Cys Glu Leu Lys Ile Leu Asp Phe Gly Leu Ala Arg
 165 170 175

Gln Ala Asp Ser Glu Met Thr Gly Tyr Val Val Thr Arg Trp Tyr Arg
 180 185 190

Ala Pro Glu Val Ile Leu Asn Trp Met Arg Tyr Thr Gln Thr Val Asp
 195 200 205

Ile Trp Ser Val Gly Cys Ile Met Ala Glu Met Ile Thr Gly Lys Thr
 210 215 220

Leu Phe Lys Gly Ser Asp His Leu Asp Gln Leu Lys Glu Ile Met Lys
 225 230 235 240

Val Thr Gly Thr Pro Pro Ala Glu Phe Val Gln Arg Leu Gln Ser Asp
 245 250 255
 Glu Ala Lys Asn Asn Met Lys Gly Leu Pro Glu Leu Glu Lys Lys Asp
 260 265 270
 Phe Ala Ser Ile Leu Thr Asn Ala Ser Pro Leu Ala Val Asn Leu Leu
 275 280 285
 Glu Lys Met Leu Val Leu Asp Ala Glu Gln Arg Val Thr Ala Gly Glu
 290 295 300
 Ala Leu Ala His Pro Tyr Phe Glu Ser Leu His Asp Thr Glu Asp Glu
 305 310 315 320
 Pro Gln Val Gln Lys Tyr Asp Asp Ser Phe Asp Asp Val Asp Arg Thr
 325 330 335
 Leu Asp Glu Trp Lys Arg Val Thr Tyr Lys Glu Val Leu Ser Phe Lys
 340 345 350
 Pro Pro Arg Gln Leu Gly Ala Arg Val Ser Lys Glu Thr Pro Leu
 355 360 365

<210> 17
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 17
 Ser Gln Glu Arg Pro Thr Phe Tyr Arg Gln Glu Leu Asn Lys Thr Ile
 1 5 10 15
 Trp Glu Val Pro Glu Arg Tyr Gln Asn Leu Ser Pro Val Gly Ser Gly
 20 25 30
 Ala Tyr Gly Ser Val Cys Ala Ala Phe Asp Thr Lys Thr Gly Leu Arg
 35 40 45
 Val Ala Val Lys Lys Leu Ser Arg Pro Phe Gln Ser Ile Ile His Ala
 50 55 60
 Lys Arg Thr Tyr Arg Glu Leu Arg Leu Lys His Met Lys His Glu
 65 70 75 80
 Asn Val Ile Gly Leu Leu Asp Val Phe Thr Pro Ala Arg Ser Leu Glu
 85 90 95
 Glu Phe Asn Asp Val Tyr Leu Val Thr His Leu Met Gly Ala Asp Leu
 100 105 110
 Asn Asn Ile Val Lys Cys Gln Lys Leu Thr Asp Asp His Val Gln Phe
 115 120 125
 Leu Ile Tyr Gln Ile Leu Arg Gly Leu Lys Tyr Ile His Ser Ala Asp
 130 135 140

Ile Ile His Arg Asp Leu Lys Pro Ser Asn Leu Ala Val Asn Glu Asp
 145 150 155 160

Cys Glu Leu Lys Ile Leu Asp Phe Gly Leu Ala Arg His Thr Asp Asp
 165 170 175

Glu Met Thr Gly Tyr Val Ala Thr Arg Trp Tyr Arg Ala Pro Glu Ile
 180 185 190

Met Leu Asn Trp Met His Tyr Asn Gln Thr Val Asp Ile Trp Ser Val
 195 200 205

Gly Cys Ile Met Ala Glu Leu Leu Thr Gly Arg Thr Leu Phe Pro Gly
 210 215 220

Thr Asp His Ile Asp Gln Leu Lys Leu Ile Leu Arg Leu Val Gly Thr
 225 230 235 240

Pro Gly Ala Glu Leu Leu Lys Lys Ile Ser Ser Glu Ser Ala Arg Asn
 245 250 255

Tyr Ile Gln Ser Leu Thr Gln Met Pro Lys Met Asn Phe Ala Asn Val
 260 265 270

Phe Ile Gly Ala Asn Pro Leu Ala Val Asp Leu Leu Glu Lys Met Leu
 275 280 285

Val Leu Asp Ser Asp Lys Arg Ile Thr Ala Ala Gln Ala Leu Ala His
 290 295 300

Ala Tyr Phe Ala Gln Tyr His Asp Pro Asp Asp Glu Pro Val Ala Asp
 305 310 315 320

Pro Tyr Asp Gln Ser Phe Glu Ser Arg Asp Leu Leu Ile Asp Glu Trp
 325 330 335

Lys Ser Leu Thr Tyr Asp Glu Val Ile Ser Phe Val Pro Pro Pro Leu
 340 345 350

Asp Gln Glu Glu Met Glu Ser
 355

<210> 18
 <211> 411
 <212> PRT
 <213> Homo sapiens

<400> 18
 Pro Thr Leu Asp Val Lys Ile Ala Phe Cys Gln Gly Phe Asp Lys Gln
 1 5 10 15

Val Asp Val Ser Tyr Ile Ala Lys His Tyr Asn Met Ser Lys Ser Lys
 20 25 30

Val Asp Asn Gln Phe Tyr Ser Val Glu Val Gly Asp Ser Thr Phe Thr
 35 40 45

Val Leu Lys Arg Tyr Gln Asn Leu Lys Pro Ile Gly Ser Gly Ala Gln
 50 55 60

Gly Ile Val Cys Ala Ala Tyr Asp Ala Val Leu Asp Arg Asn Val Ala
 65 70 75 80

Ile Lys Lys Leu Ser Arg Pro Phe Gln Asn Gln Thr His Ala Lys Arg
 85 90 95

Ala Tyr Arg Glu Leu Val Leu Met Lys Cys Val Asn His Lys Asn Ile
 100 105 110

Ile Ser Leu Leu Asn Val Phe Thr Pro Gln Lys Thr Leu Glu Glu Phe
 115 120 125

Gln Asp Val Tyr Leu Val Met Glu Leu Met Asp Ala Asn Leu Cys Gln
 130 135 140

Val Ile Gln Met Glu Leu Asp His Glu Arg Met Ser Tyr Leu Leu Tyr
 145 150 155 160

Gln Met Leu Cys Gly Ile Lys His Leu His Ser Ala Gly Ile Ile His
 165 170 175

Arg Asp Leu Lys Pro Ser Asn Ile Val Val Lys Ser Asp Cys Thr Leu
 180 185 190

Lys Ile Leu Asp Phe Gly Leu Ala Arg Thr Ala Gly Thr Ser Phe Met
 195 200 205

Met Thr Pro Tyr Val Val Thr Arg Tyr Tyr Arg Ala Pro Glu Val Ile
 210 215 220

Leu Gly Met Gly Tyr Lys Glu Asn Val Asp Ile Trp Ser Val Gly Cys
 225 230 235 240

Ile Met Gly Glu Met Val Arg His Lys Ile Leu Phe Pro Gly Arg Asp
 245 250 255

Tyr Ile Asp Gln Trp Asn Lys Val Ile Glu Gln Leu Gly Thr Pro Cys
 260 265 270

Pro Glu Phe Met Lys Lys Leu Gln Pro Thr Val Arg Asn Tyr Val Glu
 275 280 285

Asn Arg Pro Lys Tyr Ala Gly Leu Thr Phe Pro Lys Leu Phe Pro Asp
 290 295 300

Ser Leu Phe Pro Ala Asp Ser Glu His Asn Lys Leu Lys Ala Ser Gln
 305 310 315 320

Ala Arg Asp Leu Leu Ser Lys Met Leu Val Ile Asp Pro Ala Lys Arg
 325 330 335

Ile Ser Val Asp Asp Ala Leu Gln His Pro Tyr Ile Asn Val Trp Tyr
 340 345 350

Asp Pro Ala Glu Val Glu Ala Pro Pro Pro Gln Ile Tyr Asp Lys Gln
 355 360 365

Leu Asp Glu Arg Glu His Thr Ile Glu Glu Trp Lys Glu Leu Ile Tyr
 370 375 380

Lys Glu Val Met Asn Ser Glu Glu Lys Thr Lys Asn Gly Val Val Lys
 385 390 395 400

Gly Gln Pro Ser Pro Ser Ala Gln Val Gln Gln
 405 410

<210> 19

<211> 356

<212> PRT

<213> Mus musculus

<400> 19

Ala Ala Ala Ala Ala Gly Pro Glu Met Val Arg Gly Gln Val Phe Asp
 1 5 10 15

Val Gly Pro Arg Tyr Thr Asn Leu Ser Tyr Ile Gly Glu Gly Ala Tyr
 20 25 30

Gly Met Val Cys Ser Ala Tyr Asp Asn Leu Asn Lys Val Arg Val Ala
 35 40 45

Ile Lys Lys Ile Ser Pro Phe Glu His Gln Thr Tyr Cys Gln Arg Thr
 50 55 60

Leu Arg Glu Ile Lys Ile Leu Leu Arg Phe Arg His Glu Asn Ile Ile
 65 70 75 80

Gly Ile Asn Asp Ile Ile Arg Ala Pro Thr Ile Glu Gln Met Lys Asp
 85 90 95

Val Tyr Ile Val Gln Asp Leu Met Glu Thr Asp Leu Tyr Lys Leu Leu
 100 105 110

Lys Thr Gln His Leu Ser Asn Asp His Ile Cys Tyr Phe Leu Tyr Gln
 115 120 125

Ile Leu Arg Gly Leu Lys Tyr Ile His Ser Ala Asn Val Leu His Arg
 130 135 140

Asp Leu Lys Pro Ser Asn Leu Leu Asn Thr Thr Cys Asp Leu Lys
 145 150 155 160

Ile Cys Asp Phe Gly Leu Ala Arg Val Ala Asp Pro Asp His Asp His
 165 170 175

Thr Gly Phe Leu Thr Glu Tyr Val Ala Thr Arg Trp Tyr Arg Ala Pro
 180 185 190

Glu Ile Met Leu Asn Ser Lys Gly Tyr Thr Lys Ser Ile Asp Ile Trp
 195 200 205

Ser Val Gly Cys Ile Leu Ala Glu Met Leu Ser Asn Arg Pro Ile Phe
 210 215 220
 Pro Gly Lys His Tyr Leu Asp Gln Leu Asn His Ile Leu Gly Ile Leu
 225 230 235 240
 Gly Ser Pro Ser Gln Glu Asp Leu Asn Cys Ile Ile Asn Leu Lys Ala
 245 250 255
 Arg Asn Tyr Leu Leu Ser Leu Pro His Lys Asn Lys Val Pro Trp Asn
 260 265 270
 Arg Leu Phe Pro Asn Ala Asp Ser Lys Ala Leu Asp Leu Leu Asp Lys
 275 280 285
 Met Leu Thr Phe Asn Pro His Lys Arg Ile Glu Val Glu Gln Ala Leu
 290 295 300
 Ala His Pro Tyr Leu Glu Gln Tyr Tyr Asp Pro Ser Asp Glu Pro Ile
 305 310 315 320
 Ala Glu Ala Pro Phe Lys Phe Asp Met Glu Leu Asp Asp Leu Pro Lys
 325 330 335
 Glu Lys Leu Lys Glu Leu Ile Phe Glu Glu Thr Ala Arg Phe Gln Pro
 340 345 350
 Gly Tyr Arg Ser
 355

<210> 20
 <211> 316
 <212> PRT
 <213> Homo sapiens

<220>
 <221> MOD_RES
 <222> (312)
 <223> Variable amino acid

<400> 20
 Ser Pro Arg Ser Thr Phe Ser Thr Leu Gln Glu Leu Val Asp His Tyr
 1 5 10 15
 Lys Lys Gly Asn Asp Gly Leu Cys Gln Lys Leu Ser Val Pro Cys Met
 20 25 30
 Ser Ser Lys Pro Gln Lys Pro Trp Glu Lys Asp Ala Trp Glu Ile Pro
 35 40 45
 Arg Glu Ser Leu Lys Leu Glu Lys Lys Leu Gly Ala Gly Gln Phe Gly
 50 55 60
 Glu Val Trp Met Ala Thr Tyr Asn Lys His Thr Lys Val Ala Val Lys
 65 70 75 80

Thr Met Lys Pro Gly Ser Met Ser Val Glu Ala Phe Leu Ala Glu Ala
 85 90 95
 Asn Val Met Lys Thr Leu Gln His Asp Lys Leu Val Lys Leu His Ala
 100 105 110
 Val Val Thr Lys Glu Pro Ile Tyr Ile Ile Thr Glu Phe Met Ala Lys
 115 120 125
 Gly Ser Leu Leu Asp Phe Leu Lys Ser Asp Glu Gly Ser Lys Gln Pro
 130 135 140
 Leu Pro Lys Leu Ile Asp Phe Ser Ala Gln Ile Ala Glu Gly Met Ala
 145 150 155 160
 Phe Ile Glu Gln Arg Asn Tyr Ile His Arg Asp Leu Arg Ala Ala Asn
 165 170 175
 Ile Leu Val Ser Ala Ser Leu Val Cys Lys Ile Ala Asp Phe Gly Leu
 180 185 190
 Ala Arg Val Ile Glu Asp Asn Glu Tyr Thr Ala Arg Glu Gly Ala Lys
 195 200 205
 Phe Pro Ile Lys Trp Thr Ala Pro Glu Ala Ile Asn Phe Gly Ser Phe
 210 215 220
 Thr Ile Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Met Glu Ile
 225 230 235 240
 Val Thr Tyr Gly Arg Ile Pro Tyr Pro Gly Met Ser Asn Pro Glu Val
 245 250 255
 Ile Arg Ala Leu Glu Arg Gly Tyr Arg Met Pro Arg Pro Glu Asn Cys
 260 265 270
 Pro Glu Glu Leu Tyr Asn Ile Met Met Arg Cys Trp Lys Asn Arg Pro
 275 280 285
 Glu Glu Arg Pro Thr Phe Glu Tyr Ile Gln Ser Val Leu Asp Asp Phe
 290 295 300
 Tyr Thr Ala Thr Glu Ser Gln Xaa Glu Glu Ile Pro
 305 310 315

 <210> 21
 <211> 279
 <212> PRT
 <213> Homo sapiens

 <400> 21
 Lys Pro Trp Trp Glu Asp Glu Trp Glu Val Pro Arg Glu Thr Leu Lys
 1 5 10 15
 Leu Val Glu Arg Leu Gly Ala Gly Gln Phe Gly Glu Val Trp Met Gly
 20 25 30

Tyr Tyr Asn Gly His Thr Lys Val Ala Val Lys Ser Leu Lys Gln Gly
 35 40 45

Ser Met Ser Pro Asp Ala Phe Leu Ala Glu Ala Asn Leu Met Lys Gln
 50 55 60

Leu Gln His Gln Arg Leu Val Arg Leu Tyr Ala Val Val Thr Gln Glu
 65 70 75 80

Pro Ile Tyr Ile Ile Thr Glu Tyr Met Glu Asn Gly Ser Leu Val Asp
 85 90 95

Phe Leu Lys Thr Pro Ser Gly Ile Lys Leu Thr Ile Asn Lys Leu Leu
 100 105 110

Asp Met Ala Ala Gln Ile Ala Glu Gly Met Ala Phe Ile Glu Glu Arg
 115 120 125

Asn Tyr Ile His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val Ser Asp
 130 135 140

Thr Leu Ser Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Leu Ile Glu
 145 150 155 160

Asp Asn Glu Tyr Thr Ala Arg Glu Gly Ala Lys Phe Pro Ile Lys Trp
 165 170 175

Thr Ala Pro Glu Ala Ile Asn Tyr Gly Thr Phe Thr Ile Lys Ser Asp
 180 185 190

Val Trp Ser Phe Gly Ile Leu Leu Thr Glu Ile Val Thr His Gly Arg
 195 200 205

Ile Pro Tyr Pro Gly Met Thr Asn Pro Glu Val Ile Gln Asn Leu Glu
 210 215 220

Arg Gly Tyr Arg Met Val Arg Pro Asp Asn Cys Pro Glu Glu Leu Tyr
 225 230 235 240

Gln Leu Met Arg Leu Cys Trp Lys Glu Arg Pro Glu Asp Arg Pro Thr
 245 250 255

Phe Asp Tyr Leu Arg Ser Val Leu Glu Asp Phe Phe Thr Ala Thr Glu
 260 265 270

Gly Gln Tyr Gln Pro Gln Pro
 275

<210> 22
 <211> 319
 <212> PRT
 <213> Homo sapiens

<400> 22
 Thr Ser Arg Thr Gln Phe Asn Ser Leu Gln Gln Leu Val Ala Tyr Tyr
 1 5 10 15

Ser Lys His Ala Asp Gly Leu Cys His Arg Leu Thr Thr Val Cys Pro
 20 25 30

 Thr Ser Lys Pro Gln Thr Gln Gly Leu Ala Lys Asp Ala Trp Glu Ile
 35 40 45

 Pro Arg Glu Ser Leu Arg Leu Glu Val Lys Leu Gly Gln Gly Cys Phe
 50 55 60

 Gly Glu Val Trp Met Gly Thr Trp Asn Gly Thr Thr Arg Val Ala Ile
 65 70 75 80

 Lys Thr Leu Lys Pro Gly Thr Met Ser Pro Glu Ala Phe Leu Gln Glu
 85 90 95

 Ala Gln Val Met Lys Lys Leu Arg His Glu Lys Leu Val Gln Leu Tyr
 100 105 110

 Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr Glu Tyr Met Ser
 115 120 125

 Lys Gly Ser Leu Leu Asp Phe Leu Lys Gly Glu Thr Gly Lys Tyr Leu
 130 135 140

 Arg Leu Pro Gln Leu Val Asp Met Ala Ala Gln Ile Ala Ser Gly Met
 145 150 155 160

 Ala Tyr Val Glu Arg Met Asn Tyr Val His Arg Asp Leu Arg Ala Ala
 165 170 175

 Asn Ile Leu Val Gly Glu Asn Leu Val Cys Lys Val Ala Asp Phe Gly
 180 185 190

 Leu Ala Arg Leu Ile Glu Asp Asn Glu Tyr Thr Ala Arg Gln Gly Ala
 195 200 205

 Lys Phe Pro Ile Lys Trp Thr Ala Pro Glu Ala Ala Leu Tyr Gly Arg
 210 215 220

 Phe Thr Ile Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Thr Glu
 225 230 235 240

 Leu Thr Thr Lys Gly Arg Val Pro Tyr Pro Gly Met Val Asn Arg Glu
 245 250 255

 Val Leu Asp Gln Val Glu Arg Gly Tyr Arg Met Pro Cys Pro Pro Glu
 260 265 270

 Cys Pro Glu Ser Leu His Asp Leu Met Cys Gln Cys Trp Arg Lys Glu
 275 280 285

 Pro Glu Glu Arg Pro Thr Phe Glu Tyr Leu Gln Ala Phe Leu Glu Asp
 290 295 300

 Tyr Phe Thr Ser Thr Glu Pro Gln Tyr Gln Pro Gly Glu Asn Leu
 305 310 315

<210> 23

<211> 293

<212> PRT

<213> Mus musculus

<400> 23

Gly	Ala	Met	Asp	Pro	Ser	Ser	Pro	Asn	Tyr	Asp	Lys	Trp	Glu	Met	Glu
1														15	

Arg	Thr	Asp	Ile	Thr	Met	Lys	His	Lys	Leu	Gly	Gly	Gly	Gln	Tyr	Gly
														30	
20									25						

Glu	Val	Tyr	Glu	Gly	Val	Trp	Lys	Lys	Tyr	Ser	Leu	Thr	Val	Ala	Val
35							40						45		

Lys	Thr	Leu	Lys	Glu	Asp	Thr	Met	Glu	Val	Glu	Glu	Phe	Leu	Lys	Glu
50							55					60			

Ala	Ala	Val	Met	Lys	Glu	Ile	Lys	His	Pro	Asn	Leu	Val	Gln	Leu	Leu
65						70					75		80		

Gly	Val	Cys	Thr	Arg	Glu	Pro	Pro	Phe	Tyr	Ile	Ile	Thr	Glu	Phe	Met
85									90				95		

Thr	Tyr	Gly	Asn	Leu	Leu	Asp	Tyr	Leu	Arg	Glu	Cys	Asn	Arg	Gln	Glu
100								105					110		

Val	Ser	Ala	Val	Val	Leu	Leu	Tyr	Met	Ala	Thr	Gln	Ile	Ser	Ser	Ala
115							120					125			

Met	Glu	Tyr	Leu	Glu	Lys	Lys	Asn	Phe	Ile	His	Arg	Asp	Leu	Ala	Ala
130							135					140			

Arg	Asn	Cys	Leu	Val	Gly	Glu	Asn	His	Leu	Val	Lys	Val	Ala	Asp	Phe
145						150					155		160		

Gly	Leu	Ser	Arg	Leu	Met	Thr	Gly	Asp	Thr	Tyr	Thr	Ala	His	Ala	Gly
165									170				175		

Ala	Lys	Phe	Pro	Ile	Lys	Trp	Thr	Ala	Pro	Glu	Ser	Leu	Ala	Tyr	Asn
180								185				190			

Lys	Phe	Ser	Ile	Lys	Ser	Asp	Val	Trp	Ala	Phe	Gly	Val	Leu	Leu	Trp
195							200				205				

Glu	Ile	Ala	Thr	Tyr	Gly	Met	Ser	Pro	Tyr	Pro	Gly	Ile	Asp	Leu	Ser
210						215					220				

Gln	Val	Tyr	Glu	Leu	Leu	Glu	Lys	Asp	Tyr	Arg	Met	Glu	Arg	Pro	Glu
225						230					235		240		

Gly	Cys	Pro	Glu	Lys	Val	Tyr	Glu	Leu	Met	Arg	Ala	Cys	Trp	Gln	Trp
245						250					255				

Asn	Pro	Ser	Asp	Arg	Pro	Ser	Phe	Ala	Glu	Ile	His	Gln	Ala	Phe	Glu
260								265				270			

Thr Met Phe Gln Glu Ser Ser Ile Ser Asp Glu Val Glu Lys Glu Leu
 275 280 285

Gly Lys Arg Gly Thr
 290

<210> 24
 <211> 312
 <212> PRT
 <213> Mus musculus

<400> 24
 Gly His Met Thr Pro Gly Met Lys Ile Phe Ile Asp Pro Phe Thr Phe
 1 5 10 15

Glu Asp Pro Asn Glu Ala Val Arg Glu Phe Ala Lys Glu Ile Asp Ile
 20 25 30

Ser Cys Val Lys Ile Glu Gln Val Ile Gly Ala Gly Glu Phe Gly Glu
 35 40 45

Val Cys Ser Gly His Leu Lys Leu Pro Gly Lys Arg Glu Ile Phe Val
 50 55 60

Ala Ile Lys Thr Leu Lys Ser Gly Tyr Thr Glu Lys Gln Arg Arg Asp
 65 70 75 80

Phe Leu Ser Glu Ala Ser Ile Met Gly Gln Phe Asp His Pro Asn Val
 85 90 95

Ile His Leu Glu Gly Val Val Thr Lys Ser Thr Pro Val Met Ile Ile
 100 105 110

Thr Glu Phe Met Glu Asn Gly Ser Leu Asp Ser Phe Leu Arg Gln Asn
 115 120 125

Asp Gly Gln Phe Thr Val Ile Gln Leu Val Gly Met Leu Arg Gly Ile
 130 135 140

Ala Ala Gly Met Lys Tyr Leu Ala Asp Met Asn Tyr Val His Arg Asp
 145 150 155 160

Leu Ala Ala Arg Asn Ile Leu Val Asn Ser Asn Leu Val Cys Lys Val
 165 170 175

Ser Asp Phe Gly Leu Ser Arg Phe Leu Glu Asp Asp Thr Ser Asp Pro
 180 185 190

Thr Tyr Thr Ser Ala Leu Gly Gly Lys Ile Pro Ile Arg Trp Thr Ala
 195 200 205

Pro Glu Ala Ile Gln Tyr Arg Lys Phe Thr Ser Ala Ser Asp Val Trp
 210 215 220

Ser Tyr Gly Ile Val Met Trp Glu Val Met Ser Tyr Gly Glu Arg Pro
 225 230 235 240

Tyr Trp Asp Met Thr Asn Gln Asp Val Ile Asn Ala Ile Glu Gln Asp
 245 250 255

Tyr Arg Leu Pro Pro Pro Met Asp Cys Pro Ser Ala Leu His Gln Leu
 260 265 270

Met Leu Asp Cys Trp Gln Lys Asp Arg Asn His Arg Pro Lys Phe Gly
 275 280 285

Gln Ile Val Asn Thr Leu Asp Lys Met Ile Arg Asn Pro Asn Ser Leu
 290 295 300

Lys Ala Met Ala Pro Leu Ser Ser
 305 310

<210> 25

<211> 278

<212> PRT

<213> Homo sapiens

<400> 25

Met Gly Gly Ser Val Ala Ala Gln Asp Glu Phe Tyr Arg Ser Gly Trp
 1 5 10 15

Ala Leu Asn Met Lys Glu Leu Lys Leu Leu Gln Thr Ile Gly Lys Gly
 20 25 30

Glu Phe Gly Asp Val Met Leu Gly Asp Tyr Arg Gly Asn Lys Val Ala
 35 40 45

Val Lys Cys Ile Lys Asn Asp Ala Thr Ala Gln Ala Phe Leu Ala Glu
 50 55 60

Ala Ser Val Met Thr Gln Leu Arg His Ser Asn Leu Val Gln Leu Leu
 65 70 75 80

Gly Val Ile Val Glu Glu Lys Gly Gly Leu Tyr Ile Val Thr Glu Tyr
 85 90 95

Met Ala Lys Gly Ser Leu Val Asp Tyr Leu Arg Ser Arg Gly Arg Ser
 100 105 110

Val Leu Gly Gly Asp Cys Leu Leu Lys Phe Ser Leu Asp Val Cys Glu
 115 120 125

Ala Met Glu Tyr Leu Glu Gly Asn Asn Phe Val His Arg Asp Leu Ala
 130 135 140

Ala Arg Asn Val Leu Val Ser Glu Asp Asn Val Ala Lys Val Ser Asp
 145 150 155 160

Phe Gly Leu Thr Lys Glu Ala Ser Ser Thr Gln Asp Thr Gly Lys Leu
 165 170 175

Pro Val Lys Trp Thr Ala Pro Glu Ala Leu Arg Glu Lys Lys Phe Ser
 180 185 190

Thr Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Trp Glu Ile Tyr
 195 200 205
 Ser Phe Gly Arg Val Pro Tyr Pro Arg Ile Pro Leu Lys Asp Val Val
 210 215 220
 Pro Arg Val Glu Lys Gly Tyr Lys Met Asp Ala Pro Asp Gly Cys Pro
 225 230 235 240
 Pro Ala Val Tyr Glu Val Met Lys Asn Cys Trp His Leu Asp Ala Ala
 245 250 255
 Met Arg Pro Ser Phe Leu Gln Leu Arg Glu Gln Leu Glu His Ile Lys
 260 265 270
 Thr His Glu Leu His Leu
 275

<210> 26
 <211> 366
 <212> PRT
 <213> Homo sapiens

<400> 26
 Met Asp Pro Asp Glu Leu Pro Leu Asp Glu His Cys Glu Arg Leu Pro
 1 5 10 15
 Tyr Asp Ala Ser Lys Trp Glu Phe Pro Arg Asp Arg Leu Lys Leu Gly
 20 25 30
 Lys Pro Leu Gly Arg Gly Ala Phe Gly Gln Val Ile Glu Ala Asp Ala
 35 40 45
 Phe Gly Ile Asp Lys Thr Ala Thr Cys Arg Thr Val Ala Val Lys Met
 50 55 60
 Leu Lys Glu Gly Ala Thr His Ser Glu His Arg Ala Leu Met Ser Glu
 65 70 75 80
 Leu Lys Ile Leu Ile His Ile Gly His His Leu Asn Val Val Asn Leu
 85 90 95
 Leu Gly Ala Cys Thr Lys Pro Gly Gly Pro Leu Met Val Ile Val Glu
 100 105 110
 Phe Cys Lys Phe Gly Asn Leu Ser Thr Tyr Leu Arg Ser Lys Arg Asn
 115 120 125
 Glu Phe Val Pro Tyr Lys Thr Lys Gly Ala Arg Phe Arg Gln Gly Lys
 130 135 140
 Asp Tyr Val Gly Ala Ile Pro Val Asp Leu Lys Arg Arg Leu Asp Ser
 145 150 155 160
 Ile Thr Ser Ser Gln Ser Ser Ala Ser Ser Gly Phe Val Glu Glu Lys
 165 170 175

Ser Leu Ser Asp Val Glu Glu Glu Ala Pro Glu Asp Leu Tyr Lys
 180 185 190
 Asp Phe Leu Thr Leu Glu His Leu Ile Cys Tyr Ser Phe Gln Val Ala
 195 200 205
 Lys Gly Met Glu Phe Leu Ala Ser Arg Lys Cys Ile His Arg Asp Leu
 210 215 220
 Ala Ala Arg Asn Ile Leu Leu Ser Glu Lys Asn Val Val Lys Ile Cys
 225 230 235 240
 Asp Phe Gly Leu Ala Arg Asp Ile Tyr Lys Asp Pro Asp Tyr Val Arg
 245 250 255
 Lys Gly Asp Ala Arg Leu Pro Leu Lys Trp Met Ala Pro Glu Thr Ile
 260 265 270
 Phe Asp Arg Val Tyr Thr Ile Gln Ser Asp Val Trp Ser Phe Gly Val
 275 280 285
 Leu Leu Trp Glu Ile Phe Ser Leu Gly Ala Ser Pro Tyr Pro Gly Val
 290 295 300
 Lys Ile Asp Glu Glu Phe Cys Arg Arg Leu Lys Glu Gly Thr Arg Met
 305 310 315 320
 Arg Ala Pro Asp Tyr Thr Pro Glu Met Tyr Gln Thr Met Leu Asp
 325 330 335
 Cys Trp His Gly Glu Pro Ser Gln Arg Pro Thr Phe Ser Glu Leu Val
 340 345 350
 Glu His Leu Gly Asn Leu Leu Gln Ala Asn Ala Gln Gln Asp
 355 360 365

 <210> 27
 <211> 310
 <212> PRT
 <213> Homo sapiens

 <400> 27
 Met Val Ala Gly Val Ser Glu Tyr Glu Leu Pro Glu Asp Pro Arg Trp
 1 5 10 15
 Glu Leu Pro Arg Asp Arg Leu Val Leu Gly Lys Pro Leu Gly Glu Gly
 20 25 30
 Ala Phe Gly Gln Val Val Leu Ala Glu Ala Ile Gly Leu Asp Lys Asp
 35 40 45
 Lys Pro Asn Arg Val Thr Lys Val Ala Val Lys Met Leu Lys Ser Asp
 50 55 60
 Ala Thr Glu Lys Asp Leu Ser Asp Leu Ile Ser Glu Met Glu Met Met
 65 70 75 80

Lys Met Ile Gly Lys His Lys Asn Ile Ile Asn Leu Leu Gly Ala Cys
 85 90 95

 Thr Gln Asp Gly Pro Leu Tyr Val Ile Val Glu Tyr Ala Ser Lys Gly
 100 105 110

 Asn Leu Arg Glu Tyr Leu Gln Ala Arg Arg Pro Pro Gly Leu Glu Tyr
 115 120 125

 Ser Tyr Asn Pro Ser His Asn Pro Glu Glu Gln Leu Ser Ser Lys Asp
 130 135 140

 Leu Val Ser Cys Ala Tyr Gln Val Ala Arg Gly Met Glu Tyr Leu Ala
 145 150 155 160

 Ser Lys Lys Cys Ile His Arg Asp Leu Ala Ala Arg Asn Val Leu Val
 165 170 175

 Thr Glu Asp Asn Val Met Lys Ile Ala Asp Phe Gly Leu Ala Arg Asp
 180 185 190

 Ile His His Ile Asp Tyr Tyr Lys Lys Thr Thr Asn Gly Arg Leu Pro
 195 200 205

 Val Lys Trp Met Ala Pro Glu Ala Leu Phe Asp Arg Ile Tyr Thr His
 210 215 220

 Gln Ser Asp Val Trp Ser Phe Gly Val Leu Leu Trp Glu Ile Phe Thr
 225 230 235 240

 Leu Gly Gly Ser Pro Tyr Pro Gly Val Pro Val Glu Glu Leu Phe Lys
 245 250 255

 Leu Leu Lys Glu Gly His Arg Met Asp Lys Pro Ser Asn Cys Thr Asn
 260 265 270

 Glu Leu Tyr Met Met Arg Asp Cys Trp His Ala Val Pro Ser Gln
 275 280 285

 Arg Pro Thr Phe Lys Gln Leu Val Glu Asp Leu Asp Arg Ile Val Ala
 290 295 300

 Leu Thr Ser Asn Gln Glu
 305 310

 <210> 28
 <211> 327
 <212> PRT
 <213> Homo sapiens

 <400> 28
 Met Lys Lys His His His His His Gly Lys Asn Asn Pro Asp Pro
 1 5 10 15

 Thr Ile Tyr Pro Val Leu Asp Trp Asn Asp Ile Lys Phe Gln Asp Val
 20 25 30

Ile Gly Glu Gly Asn Phe Gly Gln Val Leu Lys Ala Arg Ile Lys Lys
 35 40 45

Asp Gly Leu Arg Met Asp Ala Ala Ile Lys Arg Met Lys Glu Tyr Ala
 50 55 60

Ser Lys Asp Asp His Arg Asp Phe Ala Gly Glu Leu Glu Val Leu Cys
 65 70 75 80

Lys Leu Gly His His Pro Asn Ile Ile Asn Leu Leu Gly Ala Cys Glu
 85 90 95

His Arg Gly Tyr Leu Tyr Leu Ala Ile Glu Tyr Ala Pro His Gly Asn
 100 105 110

Leu Leu Asp Phe Leu Arg Lys Ser Arg Val Leu Glu Thr Asp Pro Ala
 115 120 125

Phe Ala Ile Ala Asn Ser Thr Ala Ser Thr Leu Ser Ser Gln Gln Leu
 130 135 140

Leu His Phe Ala Ala Asp Val Ala Arg Gly Met Asp Tyr Leu Ser Gln
 145 150 155 160

Lys Gln Phe Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly
 165 170 175

Glu Asn Tyr Val Ala Lys Ile Ala Asp Phe Gly Leu Ser Arg Gly Gln
 180 185 190

Glu Val Tyr Val Lys Lys Thr Met Gly Arg Leu Pro Val Arg Trp Met
 195 200 205

Ala Ile Glu Ser Leu Asn Tyr Ser Val Tyr Thr Thr Asn Ser Asp Val
 210 215 220

Trp Ser Tyr Gly Val Leu Leu Trp Glu Ile Val Ser Leu Gly Gly Thr
 225 230 235 240

Pro Tyr Cys Gly Met Thr Cys Ala Glu Leu Tyr Glu Lys Leu Pro Gln
 245 250 255

Gly Tyr Arg Leu Glu Lys Pro Leu Asn Cys Asp Asp Glu Val Tyr Asp
 260 265 270

Leu Met Arg Gln Cys Trp Arg Glu Lys Pro Tyr Glu Arg Pro Ser Phe
 275 280 285

Ala Gln Ile Leu Val Ser Leu Asn Arg Met Leu Glu Glu Arg Lys Thr
 290 295 300

Tyr Val Asn Thr Thr Leu Tyr Glu Lys Phe Thr Tyr Ala Gly Ile Asp
 305 310 315 320

Cys Ser Ala Glu Glu Ala Ala
 325

<210> 29
<211> 299
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (174)
<223> Variable amino acid

<220>
<221> MOD_RES
<222> (178)..(179)
<223> Variable amino acid

<400> 29
Val Pro Asp Glu Trp Glu Val Ala Arg Glu Lys Ile Thr Met Ser Arg
1 5 10 15
Glu Leu Gly Gln Gly Ser Phe Gly Met Val Tyr Glu Gly Val Ala Lys
20 25 30
Gly Val Val Lys Asp Glu Pro Glu Thr Arg Val Ala Ile Lys Thr Val
35 40 45
Asn Glu Ala Ala Ser Met Arg Glu Arg Ile Glu Phe Leu Asn Glu Ala
50 55 60
Ser Val Met Lys Glu Phe Asn Cys His His Val Val Arg Leu Leu Gly
65 70 75 80
Val Val Ser Gln Gly Gln Pro Thr Leu Val Ile Met Glu Leu Met Thr
85 90 95
Arg Gly Asp Leu Lys Ser Tyr Leu Arg Ser Leu Arg Pro Glu Met Glu
100 105 110
Asn Asn Pro Val Leu Ala Pro Pro Ser Leu Ser Lys Met Ile Gln Met
115 120 125
Ala Gly Glu Ile Ala Asp Gly Met Ala Tyr Leu Asn Ala Asn Lys Phe
130 135 140
Val His Arg Asp Leu Ala Ala Arg Asn Cys Met Val Ala Glu Asp Phe
145 150 155 160
Thr Val Lys Ile Gly Asp Phe Gly Met Thr Arg Asp Ile Xaa Glu Thr
165 170 175
Asp Xaa Xaa Arg Lys Gly Gly Lys Gly Leu Leu Pro Val Arg Trp Met
180 185 190
Ser Pro Glu Ser Leu Lys Asp Gly Val Phe Thr Thr Tyr Ser Asp Val
195 200 205
Trp Ser Phe Gly Val Val Leu Trp Glu Ile Ala Thr Leu Ala Glu Gln
210 215 220

Pro Tyr Gln Gly Leu Ser Asn Glu Gln Val Leu Arg Phe Val Met Glu
 225 230 235 240

Gly Gly Leu Leu Asp Lys Pro Asp Asn Cys Pro Asp Met Leu Leu Glu
 245 250 255

Leu Met Arg Met Cys Trp Gln Tyr Asn Pro Lys Met Arg Pro Ser Phe
 260 265 270

Leu Glu Ile Ile Ser Ser Ile Lys Glu Glu Met Glu Pro Gly Phe Arg
 275 280 285

Glu Val Ser Phe Tyr Tyr Ser Glu Glu Asn Lys
 290 295

<210> 30

<211> 306

<212> PRT

<213> Homo sapiens

<400> 30

Val Phe Pro Ser Ser Val Phe Val Pro Asp Glu Trp Glu Val Ser Arg
 1 5 10 15

Glu Lys Ile Thr Leu Leu Arg Glu Leu Gly Gln Gly Ser Phe Gly Met
 20 25 30

Val Tyr Glu Gly Asn Ala Arg Asp Ile Ile Lys Gly Glu Ala Glu Thr
 35 40 45

Arg Val Ala Val Lys Thr Val Asn Glu Ser Ala Ser Leu Arg Glu Arg
 50 55 60

Ile Glu Phe Leu Asn Glu Ala Ser Val Met Lys Gly Phe Thr Cys His
 65 70 75 80

His Val Val Arg Leu Leu Gly Val Val Ser Lys Gly Gln Pro Thr Leu
 85 90 95

Val Val Met Glu Leu Met Ala His Gly Asp Leu Lys Ser Tyr Leu Arg
 100 105 110

Ser Leu Arg Pro Glu Ala Glu Asn Asn Pro Gly Arg Pro Pro Pro Thr
 115 120 125

Leu Gln Glu Met Ile Gln Met Ala Ala Glu Ile Ala Asp Gly Met Ala
 130 135 140

Tyr Leu Asn Ala Lys Lys Phe Val His Arg Asp Leu Ala Ala Arg Asn
 145 150 155 160

Cys Met Val Ala His Asp Phe Thr Val Lys Ile Gly Asp Phe Gly Met
 165 170 175

Thr Arg Asp Ile Tyr Glu Thr Asp Tyr Tyr Arg Lys Gly Gly Lys Gly
 180 185 190

Leu Leu Pro Val Arg Trp Met Ala Pro Glu Ser Leu Lys Asp Gly Val
 195 200 205
 Phe Thr Thr Ser Ser Asp Met Trp Ser Phe Gly Val Val Leu Trp Glu
 210 215 220
 Ile Thr Ser Leu Ala Glu Gln Pro Tyr Gln Gly Leu Ser Asn Glu Gln
 225 230 235 240
 Val Leu Lys Phe Val Met Asp Gly Gly Tyr Leu Asp Gln Pro Asp Asn
 245 250 255
 Cys Pro Glu Arg Val Thr Asp Leu Met Arg Met Cys Trp Gln Phe Asn
 260 265 270
 Pro Lys Met Arg Pro Thr Phe Leu Glu Ile Val Asn Leu Leu Lys Asp
 275 280 285
 Asp Leu His Pro Ser Phe Pro Glu Val Ser Phe Phe His Ser Glu Glu
 290 295 300
 Asn Lys
 305

<210> 31
 <211> 352
 <212> PRT
 <213> Homo sapiens

<400> 31
 Ser Lys Val Thr Thr Val Val Ala Thr Pro Gly Gln Gly Pro Asp Arg
 1 5 10 15
 Pro Gln Glu Val Ser Tyr Thr Asp Thr Lys Val Ile Gly Asn Gly Ser
 20 25 30
 Phe Gly Val Val Tyr Gln Ala Lys Leu Cys Asp Ser Gly Glu Leu Val
 35 40 45
 Ala Ile Lys Lys Val Leu Gln Gly Lys Ala Phe Lys Asn Arg Glu Leu
 50 55 60
 Gln Ile Met Arg Lys Leu Asp His Cys Asn Ile Val Arg Leu Arg Tyr
 65 70 75 80
 Phe Phe Tyr Ser Ser Gly Glu Lys Lys Asp Glu Val Tyr Leu Asn Leu
 85 90 95
 Val Leu Asp Tyr Val Pro Glu Thr Val Tyr Arg Val Ala Arg His Tyr
 100 105 110
 Ser Arg Ala Lys Gln Thr Leu Pro Val Ile Tyr Val Lys Leu Tyr Met
 115 120 125
 Tyr Gln Leu Phe Arg Ser Leu Ala Tyr Ile His Ser Phe Gly Ile Cys
 130 135 140

His Arg Asp Ile Lys Pro Gln Asn Leu Leu Leu Asp Pro Asp Thr Ala
 145 150 155 160

Val Leu Lys Leu Cys Asp Phe Gly Ser Ala Lys Gln Leu Val Arg Gly
 165 170 175

Glu Pro Asn Val Ser Tyr Ile Cys Ser Arg Tyr Tyr Arg Ala Pro Glu
 180 185 190

Leu Ile Phe Gly Ala Thr Asp Tyr Thr Ser Ser Ile Asp Val Trp Ser
 195 200 205

Ala Gly Cys Val Leu Ala Glu Leu Leu Leu Gly Gln Pro Ile Phe Pro
 210 215 220

Gly Asp Ser Gly Val Asp Gln Leu Val Glu Ile Ile Lys Val Leu Gly
 225 230 235 240

Thr Pro Thr Arg Glu Gln Ile Arg Glu Met Asn Pro Asn Tyr Thr Glu
 245 250 255

Phe Ala Phe Pro Gln Ile Lys Ala His Pro Trp Thr Lys Val Phe Arg
 260 265 270

Pro Arg Thr Pro Pro Glu Ala Ile Ala Leu Cys Ser Arg Leu Leu Glu
 275 280 285

Tyr Thr Pro Thr Ala Arg Leu Thr Pro Leu Glu Ala Cys Ala His Ser
 290 295 300

Phe Phe Asp Glu Leu Arg Asp Pro Asn Val Lys Leu Pro Asn Gly Arg
 305 310 315 320

Asp Thr Pro Ala Leu Phe Asn Phe Thr Thr Gln Glu Leu Ser Ser Asn
 325 330 335

Pro Pro Leu Ala Thr Ile Leu Ile Pro Pro His Ala Arg Ile Gln Ala
 340 345 350

<210> 32
 <211> 321
 <212> PRT
 <213> Homo sapiens

<400> 32
 Lys Glu Leu Tyr Glu Lys Tyr Met Ile Ala Glu Asp Leu Gly Arg Gly
 1 5 10 15

Glu Phe Gly Ile Val His Arg Cys Val Glu Thr Ser Ser Lys Lys Thr
 20 25 30

Tyr Met Ala Lys Phe Val Lys Val Lys Gly Thr Asp Gln Val Leu Val
 35 40 45

Lys Lys Glu Ile Ser Ile Leu Asn Ile Ala Arg His Arg Asn Ile Leu
 50 55 60

His Leu His Glu Ser Phe Glu Ser Met Glu Glu Leu Val Met Ile Phe
 65 70 75 80

Glu Phe Ile Ser Gly Leu Asp Ile Phe Glu Arg Ile Asn Thr Ser Ala
 85 90 95

Phe Glu Leu Asn Glu Arg Glu Ile Val Ser Tyr Val His Gln Val Cys
 100 105 110

Glu Ala Leu Gln Phe Leu His Ser His Asn Ile Gly His Phe Asp Ile
 115 120 125

Arg Pro Glu Asn Ile Ile Tyr Gln Thr Arg Arg Ser Ser Thr Ile Lys
 130 135 140

Ile Ile Glu Phe Gly Gln Ala Arg Gln Leu Lys Pro Gly Asp Asn Phe
 145 150 155 160

Arg Leu Leu Phe Thr Ala Pro Glu Tyr Tyr Ala Pro Glu Val His Gln
 165 170 175

His Asp Val Val Ser Thr Ala Thr Asp Met Trp Ser Leu Gly Thr Leu
 180 185 190

Val Tyr Val Leu Leu Ser Gly Ile Asn Pro Phe Leu Ala Glu Thr Asn
 195 200 205

Gln Gln Ile Ile Glu Asn Ile Met Asn Ala Glu Tyr Thr Phe Asp Glu
 210 215 220

Glu Ala Phe Lys Glu Ile Ser Ile Glu Ala Met Asp Phe Val Asp Arg
 225 230 235 240

Leu Leu Val Lys Glu Arg Lys Ser Arg Met Thr Ala Ser Glu Ala Leu
 245 250 255

Gln His Pro Trp Leu Lys Gln Lys Ile Glu Arg Val Ser Thr Lys Val
 260 265 270

Ile Arg Thr Leu Lys His Arg Arg Tyr Tyr His Thr Leu Ile Lys Lys
 275 280 285

Asp Leu Asn Met Val Val Ser Ala Ala Arg Ile Ser Cys Gly Gly Ala
 290 295 300

Ile Arg Ser Gln Lys Gly Val Ser Val Ala Lys Val Lys Val Ala Ser
 305 310 315 320

Ile

<210> 33
<211> 327
<212> PRT
<213> Zea mays

<400> 33
Ser Lys Ala Arg Val Tyr Ala Asp Val Asn Val Leu Arg Pro Lys Glu
1 5 10 15
Tyr Trp Asp Tyr Glu Ala Leu Thr Val Gln Trp Gly Glu Gln Asp Asp
20 25 30
Tyr Glu Val Val Arg Lys Val Gly Arg Gly Lys Tyr Ser Glu Val Phe
35 40 45
Glu Gly Ile Asn Val Asn Asn Glu Lys Cys Ile Ile Lys Ile Leu
50 55 60
Lys Pro Val Lys Lys Lys Ile Lys Arg Glu Ile Lys Ile Leu Gln
65 70 75 80
Asn Leu Cys Gly Gly Pro Asn Ile Val Lys Leu Leu Asp Ile Val Arg
85 90 95
Asp Gln His Ser Lys Thr Pro Ser Leu Ile Phe Glu Tyr Val Asn Asn
100 105 110
Thr Asp Phe Lys Val Leu Tyr Pro Thr Leu Thr Asp Tyr Asp Ile Arg
115 120 125
Tyr Tyr Ile Tyr Glu Leu Leu Lys Ala Leu Asp Tyr Cys His Ser Gln
130 135 140
Gly Ile Met His Arg Asp Val Lys Pro His Asn Val Met Ile Asp His
145 150 155 160
Glu Leu Arg Lys Leu Arg Leu Ile Asp Trp Gly Leu Ala Glu Phe Tyr
165 170 175
His Pro Gly Lys Glu Tyr Asn Val Arg Val Ala Ser Arg Tyr Phe Lys
180 185 190
Gly Pro Glu Leu Leu Val Asp Leu Gln Asp Tyr Asp Tyr Ser Leu Asp
195 200 205
Met Trp Ser Leu Gly Cys Met Phe Ala Gly Met Ile Phe Arg Lys Glu
210 215 220
Pro Phe Phe Tyr Gly His Asp Asn His Asp Gln Leu Val Lys Ile Ala
225 230 235 240
Lys Val Leu Gly Thr Asp Gly Leu Asn Val Tyr Leu Asn Lys Tyr Arg
245 250 255
Ile Glu Leu Asp Pro Gln Leu Glu Ala Leu Val Gly Arg His Ser Arg
260 265 270

Lys Pro Trp Leu Lys Phe Met Asn Ala Asp Asn Gln His Leu Val Ser
 275 280 285

Pro Glu Ala Ile Asp Phe Leu Asp Lys Leu Leu Arg Tyr Asp His Gln
 290 295 300

Glu Arg Leu Thr Ala Leu Glu Ala Met Thr His Pro Tyr Phe Gln Gln
 305 310 315 320

Val Arg Ala Ala Glu Asn Ser
 325

<210> 34

<211> 297

<212> PRT

<213> Homo sapiens

<400> 34

Ser Asp Glu Glu Ile Leu Glu Lys Leu Arg Ser Ile Val Ser Val Gly
 1 5 10 15

Asp Pro Lys Lys Lys Tyr Thr Arg Phe Glu Lys Ile Gly Gln Gly Ala
 20 25 30

Ser Gly Thr Val Tyr Thr Ala Met Asp Val Ala Thr Gly Gln Glu Val
 35 40 45

Ala Ile Arg Gln Met Asn Leu Gln Gln Gln Pro Lys Lys Glu Leu Ile
 50 55 60

Ile Asn Glu Ile Leu Val Met Arg Glu Asn Lys Asn Pro Asn Ile Val
 65 70 75 80

Asn Tyr Leu Asp Ser Tyr Leu Val Gly Asp Glu Leu Trp Val Val Met
 85 90 95

Glu Tyr Leu Ala Gly Gly Ser Leu Thr Asp Val Val Thr Glu Thr Cys
 100 105 110

Met Asp Glu Gly Gln Ile Ala Ala Val Cys Arg Glu Cys Leu Gln Ala
 115 120 125

Leu Glu Phe Leu His Ser Asn Gln Val Ile His Arg Asp Ile Lys Ser
 130 135 140

Asp Asn Ile Leu Leu Gly Met Asp Gly Ser Val Lys Leu Thr Asp Phe
 145 150 155 160

Gly Phe Cys Ala Gln Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met
 165 170 175

Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Val Thr Arg Lys Ala
 180 185 190

Tyr Gly Pro Lys Val Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu
 195 200 205

Met Ile Glu Gly Glu Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala
 210 215 220

Leu Tyr Leu Ile Ala Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu
 225 230 235 240

Lys Leu Ser Ala Ile Phe Arg Asp Phe Leu Asn Arg Cys Leu Asp Met
 245 250 255

Asp Val Glu Lys Arg Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe
 260 265 270

Leu Lys Ile Ala Lys Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala
 275 280 285

Ala Lys Glu Ala Thr Lys Asn Asn His
 290 295

<210> 35

<211> 373

<212> PRT

<213> *Saccharomyces cerevisiae*

<400> 35

Asp Tyr Arg Pro Gly Gly Phe His Pro Ala Phe Lys Gly Glu Pro Tyr
 1 5 10 15

Lys Asp Ala Arg Tyr Ile Leu Val Arg Lys Leu Gly Trp Gly His Phe
 20 25 30

Ser Thr Val Trp Leu Ala Lys Asp Met Val Asn Asn Thr His Val Ala
 35 40 45

Met Lys Ile Val Arg Gly Asp Lys Val Tyr Thr Glu Ala Ala Glu Asp
 50 55 60

Glu Ile Lys Leu Leu Gln Arg Val Asn Asp Ala Asp Asn Thr Lys Glu
 65 70 75 80

Asp Ser Met Gly Ala Asn His Ile Leu Lys Leu Leu Asp His Phe Asn
 85 90 95

His Lys Gly Pro Asn Gly Val His Val Val Met Val Phe Glu Val Leu
 100 105 110

Gly Glu Asn Leu Leu Ala Leu Ile Lys Lys Tyr Glu His Arg Gly Ile
 115 120 125

Pro Leu Ile Tyr Val Lys Gln Ile Ser Lys Gln Leu Leu Leu Gly Leu
 130 135 140

Asp Tyr Met His Arg Arg Cys Gly Ile Ile His Thr Asp Ile Lys Pro
 145 150 155 160

Glu Asn Val Leu Met Glu Ile Val Asp Ser Pro Glu Asn Leu Ile Gln
 165 170 175

Ile Lys Ile Ala Asp Leu Gly Asn Ala Cys Trp Tyr Asp Glu His Tyr
 180 185 190
 Thr Asn Ser Ile Gln Thr Arg Glu Tyr Arg Ser Pro Glu Val Leu Leu
 195 200 205
 Gly Ala Pro Trp Gly Cys Gly Ala Asp Ile Trp Ser Thr Ala Cys Leu
 210 215 220
 Ile Phe Glu Leu Ile Thr Gly Asp Phe Leu Phe Glu Pro Asp Glu Gly
 225 230 235 240
 His Ser Tyr Thr Lys Asp Asp His Ile Ala Gln Ile Ile Glu Leu
 245 250 255
 Leu Gly Glu Leu Pro Ser Tyr Leu Leu Arg Asn Gly Lys Tyr Thr Arg
 260 265 270
 Thr Phe Phe Asn Ser Arg Gly Leu Leu Arg Asn Ile Ser Lys Leu Lys
 275 280 285
 Phe Trp Pro Leu Glu Asp Val Leu Thr Glu Lys Tyr Lys Phe Ser Lys
 290 295 300
 Asp Glu Ala Lys Glu Ile Ser Asp Phe Leu Ser Pro Met Leu Gln Leu
 305 310 315 320
 Asp Pro Arg Lys Arg Ala Asp Ala Gly Gly Leu Val Asn His Pro Trp
 325 330 335
 Leu Lys Asp Thr Leu Gly Met Glu Glu Ile Arg Val Pro Asp Arg Glu
 340 345 350
 Leu Tyr Gly Ser Gly Ser Asp Ile Pro Gly Trp Phe Glu Glu Val Arg
 355 360 365
 Asp His Lys Arg His
 370

<210> 36
 <211> 350
 <212> PRT
 <213> Sus scrofa

<400> 36
 Gly Asn Ala Ala Ala Ala Lys Lys Gly Ser Glu Gln Glu Ser Val Lys
 1 5 10 15

Glu Phe Leu Ala Lys Ala Lys Glu Asp Phe Leu Lys Lys Trp Glu Asn
 20 25 30

Pro Ala Gln Asn Thr Ala His Leu Asp Gln Phe Glu Arg Ile Lys Thr
 35 40 45

Leu Gly Thr Gly Ser Phe Gly Arg Val Met Leu Val Lys His Lys Glu
 50 55 60

Thr Gly Asn His Phe Ala Met Lys Ile Leu Asp Lys Gln Lys Val Val
 65 70 75 80
 Lys Leu Lys Gln Ile Glu His Thr Leu Asn Glu Lys Arg Ile Leu Gln
 85 90 95
 Ala Val Asn Phe Pro Phe Leu Val Lys Leu Glu Tyr Ser Phe Lys Asp
 100 105 110
 Asn Ser Asn Leu Tyr Met Val Met Glu Tyr Val Pro Gly Gly Glu Met
 115 120 125
 Phe Ser His Leu Arg Arg Ile Gly Arg Phe Ser Glu Pro His Ala Arg
 130 135 140
 Phe Tyr Ala Ala Gln Ile Val Leu Thr Phe Glu Tyr Leu His Ser Leu
 145 150 155 160
 Asp Leu Ile Tyr Arg Asp Leu Lys Pro Glu Asn Leu Leu Ile Asp Gln
 165 170 175
 Gln Gly Tyr Ile Gln Val Thr Asp Phe Gly Phe Ala Lys Arg Val Lys
 180 185 190
 Gly Arg Thr Trp Thr Leu Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu
 195 200 205
 Ile Ile Leu Ser Lys Gly Tyr Asn Lys Ala Val Asp Trp Trp Ala Leu
 210 215 220
 Gly Val Leu Ile Tyr Glu Met Ala Ala Gly Tyr Pro Pro Phe Phe Ala
 225 230 235 240
 Asp Gln Pro Ile Gln Ile Tyr Glu Lys Ile Val Ser Gly Lys Val Arg
 245 250 255
 Phe Pro Ser His Phe Ser Ser Asp Leu Lys Asp Leu Leu Arg Asn Leu
 260 265 270
 Leu Gln Val Asp Leu Thr Lys Arg Phe Gly Asn Leu Lys Asp Gly Val
 275 280 285
 Asn Asp Ile Lys Asn His Lys Trp Phe Ala Thr Thr Asp Trp Ile Ala
 290 295 300
 Ile Tyr Gln Arg Lys Val Glu Ala Pro Phe Ile Pro Lys Phe Lys Gly
 305 310 315 320
 Pro Gly Asp Thr Ser Asn Phe Asp Asp Tyr Glu Glu Glu Ile Arg
 325 330 335
 Val Ser Ile Asn Glu Lys Cys Gly Lys Glu Phe Ser Glu Phe
 340 345 350

<210> 37

<211> 342

<212> PRT

<213> Rattus norvegicus

<400> 37

Glu	Asp	Pro	Ser	Leu	Asp	Arg	Pro	Phe	Ile	Ser	Glu	Gly	Thr	Thr	Leu
1															15

Lys	Asp	Leu	Ile	Tyr	Asp	Met	Thr	Thr	Ser	Gly	Ser	Gly	Ser	Gly	Leu
															30
									25						

Pro	Leu	Leu	Val	Gln	Arg	Thr	Ile	Ala	Arg	Thr	Ile	Val	Leu	Gln	Glu
															45
									35						

Ser	Ile	Gly	Lys	Gly	Arg	Phe	Gly	Glu	Val	Trp	Arg	Gly	Lys	Trp	Arg
															50
									55						60

Gly	Glu	Glu	Val	Ala	Val	Lys	Ile	Phe	Ser	Ser	Arg	Glu	Glu	Arg	Ser
															80
									65						

Trp	Phe	Arg	Glu	Ala	Glu	Ile	Tyr	Gln	Thr	Val	Met	Leu	Arg	His	Glu
															95
									85						90

Asn	Ile	Leu	Gly	Phe	Ile	Ala	Ala	Asp	Asn	Lys	Asp	Asn	Gly	Thr	Trp
															110
									100						105

Thr	Gln	Leu	Trp	Leu	Val	Ser	Asp	Tyr	His	Glu	His	Gly	Ser	Leu	Phe
															125
									115						120

Asp	Tyr	Leu	Asn	Arg	Tyr	Thr	Val	Thr	Val	Glu	Gly	Met	Ile	Lys	Leu
															140
									130						135

Ala	Leu	Ser	Thr	Ala	Ser	Gly	Leu	Ala	His	Leu	His	Met	Glu	Ile	Val
															160
									145						150

Gly	Thr	Gln	Gly	Lys	Pro	Ala	Ile	Ala	His	Arg	Asp	Leu	Lys	Ser	Lys
															175
									165						170

Asn	Ile	Leu	Val	Lys	Lys	Asn	Gly	Thr	Cys	Cys	Ile	Ala	Asp	Leu	Gly
															190
									180						185

Leu	Ala	Val	Arg	His	Asp	Ser	Ala	Thr	Asp	Thr	Ile	Asp	Ile	Ala	Pro
															205
									195						200

Asn	His	Arg	Val	Gly	Thr	Lys	Arg	Tyr	Met	Ala	Pro	Glu	Val	Leu	Asp
															220
									210						215

Asp	Ser	Ile	Asn	Met	Lys	His	Phe	Glu	Ser	Phe	Lys	Arg	Ala	Asp	Ile
															240
									225						230

Tyr	Ala	Met	Gly	Leu	Val	Phe	Trp	Glu	Ile	Ala	Arg	Arg	Cys	Ser	Ile
															255
									245						250

Gly	Gly	Ile	His	Glu	Asp	Tyr	Gln	Leu	Pro	Tyr	Tyr	Asp	Leu	Val	Pro
															270
									260						265

Ser Asp Pro Ser Val Glu Glu Met Arg Lys Val Val Cys Glu Gln Lys
 275 280 285

Leu Arg Pro Asn Ile Pro Asn Arg Trp Gln Ser Cys Glu Ala Leu Arg
 290 295 300

Val Met Ala Lys Ile Met Arg Glu Cys Trp Tyr Ala Asn Gly Ala Ala
 305 310 315 320

Arg Leu Thr Ala Leu Arg Ile Lys Lys Thr Leu Ser Gln Leu Ser Gln
 325 330 335

Gln Glu Gly Ile Lys Met
 340

<210> 38

<211> 317

<212> PRT

<213> Homo sapiens

<400> 38

Met Glu Leu Arg Val Gly Asn Arg Tyr Arg Leu Gly Arg Lys Ile Gly
 1 5 10 15

Ser Gly Ser Phe Gly Asp Ile Tyr Leu Gly Thr Asp Ile Ala Ala Gly
 20 25 30

Glu Glu Val Ala Ile Lys Leu Glu Cys Val Lys Thr Lys His Pro Gln
 35 40 45

Leu His Ile Glu Ser Lys Ile Tyr Lys Met Met Gln Gly Gly Val Gly
 50 55 60

Ile Pro Thr Ile Arg Trp Cys Gly Ala Glu Gly Asp Tyr Asn Val Met
 65 70 75 80

Val Met Glu Leu Leu Gly Pro Ser Leu Glu Asp Leu Phe Asn Phe Cys
 85 90 95

Ser Arg Lys Phe Ser Leu Lys Thr Val Leu Leu Leu Ala Asp Gln Met
 100 105 110

Ile Ser Arg Ile Glu Tyr Ile His Ser Lys Asn Phe Ile His Arg Asp
 115 120 125

Val Lys Pro Asp Asn Phe Leu Met Gly Leu Gly Lys Lys Gly Asn Leu
 130 135 140

Val Tyr Ile Ile Asp Phe Gly Leu Ala Lys Lys Tyr Arg Asp Ala Arg
 145 150 155 160

Thr His Gln His Ile Pro Tyr Arg Glu Asn Lys Asn Leu Thr Gly Thr
 165 170 175

Ala Arg Tyr Ala Ser Ile Asn Thr His Leu Gly Ile Glu Gln Ser Arg
 180 185 190

Arg Asp Asp Leu Glu Ser Leu Gly Tyr Val Leu Met Tyr Phe Asn Leu
 195 200 205

Gly Ser Leu Pro Trp Gln Gly Leu Lys Ala Ala Thr Lys Arg Gln Lys
 210 215 220

Tyr Glu Arg Ile Ser Glu Lys Lys Met Ser Thr Pro Ile Glu Val Leu
 225 230 235 240

Cys Lys Gly Tyr Pro Ser Glu Phe Ala Thr Tyr Leu Asn Phe Cys Arg
 245 250 255

Ser Leu Arg Phe Asp Asp Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu
 260 265 270

Phe Arg Asn Leu Phe His Arg Gln Gly Phe Ser Tyr Asp Tyr Val Phe
 275 280 285

Asp Trp Asn Met Leu Lys Phe Gly Ala Ser Arg Ala Ala Asp Asp Ala
 290 295 300

Glu Arg Glu Arg Arg Asp Arg Glu Glu Arg Leu Arg His
 305 310 315

<210> 39
<211> 303
<212> PRT
<213> Homo sapiens

<400> 39
Ser Lys His Ala Asp Gly Leu Cys His Arg Leu Thr Thr Val Cys Pro
1 5 10 15

Thr Ser Lys Pro Gln Thr Gln Gly Leu Ala Lys Asp Ala Trp Glu Ile
20 25 30

Pro Arg Glu Ser Leu Arg Leu Glu Val Lys Leu Gly Gln Gly Cys Phe
35 40 45

Gly Glu Val Trp Met Gly Thr Trp Asn Gly Thr Thr Arg Val Ala Ile
50 55 60

Lys Thr Leu Lys Pro Gly Thr Met Ser Pro Glu Ala Phe Leu Gln Glu
65 70 75 80

Ala Gln Val Met Lys Lys Leu Arg His Glu Lys Leu Val Gln Leu Tyr
85 90 95

Ala Val Val Ser Glu Glu Pro Ile Tyr Ile Val Thr Glu Tyr Met Ser
100 105 110

Lys Gly Ser Leu Leu Asp Phe Leu Lys Gly Glu Thr Gly Lys Tyr Leu
115 120 125

Arg Leu Pro Gln Leu Val Asp Met Ala Ala Gln Ile Ala Ser Gly Met
130 135 140

Ala Tyr Val Glu Arg Met Asn Tyr Val His Arg Asp Leu Arg Ala Ala
 145 150 155 160
 Asn Ile Leu Val Gly Glu Asn Leu Val Cys Lys Val Ala Asp Phe Gly
 165 170 175
 Leu Ala Arg Leu Ile Glu Asp Asn Glu Tyr Thr Ala Arg Gln Gly Ala
 180 185 190
 Lys Phe Pro Ile Lys Trp Thr Ala Pro Glu Ala Ala Leu Tyr Gly Arg
 195 200 205
 Phe Thr Ile Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Thr Glu
 210 215 220
 Leu Thr Thr Lys Gly Arg Val Pro Tyr Pro Gly Met Val Asn Arg Glu
 225 230 235 240
 Val Leu Asp Gln Val Glu Arg Gly Tyr Arg Met Pro Cys Pro Pro Glu
 245 250 255
 Cys Pro Glu Ser Leu His Asp Leu Met Cys Gln Cys Trp Arg Lys Glu
 260 265 270
 Pro Glu Glu Arg Pro Thr Phe Glu Tyr Leu Gln Ala Phe Leu Glu Asp
 275 280 285
 Tyr Phe Thr Ser Thr Glu Pro Gln Tyr Gln Pro Gly Glu Asn Leu
 290 295 300

<210> 40
 <211> 300
 <212> PRT
 <213> Homo sapiens

<400> 40
 Lys Lys Gly Asn Asp Gly Leu Cys Gln Lys Leu Ser Val Pro Cys Met
 1 5 10 15
 Ser Ser Lys Pro Gln Lys Pro Trp Glu Lys Asp Ala Trp Glu Ile Pro
 20 25 30
 Arg Glu Ser Leu Lys Leu Glu Lys Lys Leu Gly Ala Gly Gln Phe Gly
 35 40 45
 Glu Val Trp Met Ala Thr Tyr Asn Lys His Thr Lys Val Ala Val Lys
 50 55 60
 Thr Met Lys Pro Gly Ser Met Ser Val Glu Ala Phe Leu Ala Glu Ala
 65 70 75 80
 Asn Val Met Lys Thr Leu Gln His Asp Lys Leu Val Lys Leu His Ala
 85 90 95
 Val Val Thr Lys Glu Pro Ile Tyr Ile Ile Thr Glu Phe Met Ala Lys
 100 105 110

Gly Ser Leu Leu Asp Phe Leu Lys Ser Asp Glu Gly Ser Lys Gln Pro
 115 120 125
 Leu Pro Lys Leu Ile Asp Phe Ser Ala Gln Ile Ala Glu Gly Met Ala
 130 135 140
 Phe Ile Glu Gln Arg Asn Tyr Ile His Arg Asp Leu Arg Ala Ala Asn
 145 150 155 160
 Ile Leu Val Ser Ala Ser Leu Val Cys Lys Ile Ala Asp Phe Gly Leu
 165 170 175
 Ala Arg Val Ile Glu Asp Asn Glu Tyr Thr Ala Arg Glu Gly Ala Lys
 180 185 190
 Phe Pro Ile Lys Trp Thr Ala Pro Glu Ala Ile Asn Phe Gly Ser Phe
 195 200 205
 Thr Ile Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Met Glu Ile
 210 215 220
 Val Thr Tyr Gly Arg Ile Pro Tyr Pro Gly Met Ser Asn Pro Glu Val
 225 230 235 240
 Ile Arg Ala Leu Glu Arg Gly Tyr Arg Met Pro Arg Pro Glu Asn Cys
 245 250 255
 Pro Glu Glu Leu Tyr Asn Ile Met Met Arg Cys Trp Lys Asn Arg Pro
 260 265 270
 Glu Glu Arg Pro Thr Phe Glu Tyr Ile Gln Ser Val Leu Asp Asp Phe
 275 280 285
 Tyr Thr Ala Thr Glu Ser Gln Tyr Gln Gln Pro
 290 295 300

<210> 41
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 41
 Thr Lys Thr Ser Asp Gly Leu Cys Val Lys Leu Gly Lys Pro Cys Leu
 1 5 10 15
 Lys Ile Gln Val Pro Ala Pro Phe Asp Leu Ser Tyr Lys Thr Val Asp
 20 25 30
 Gln Trp Glu Ile Asp Arg Asn Ser Ile Gln Leu Leu Lys Arg Leu Gly
 35 40 45
 Ser Gly Gln Phe Gly Glu Val Trp Glu Gly Leu Trp Asn Asn Thr Thr
 50 55 60
 Pro Val Ala Val Lys Thr Leu Lys Pro Gly Ser Met Asp Pro Asn Asp
 65 70 75 80

Phe Leu Arg Glu Ala Gln Ile Met Lys Asn Leu Arg His Pro Lys Leu
 85 90 95

 Ile Gln Leu Tyr Ala Val Cys Thr Leu Glu Asp Pro Ile Tyr Ile Ile
 100 105 110

 Thr Glu Leu Met Arg His Gly Ser Leu Gln Glu Tyr Leu Gln Asn Asp
 115 120 125

 Thr Gly Ser Lys Ile His Leu Thr Gln Gln Val Asp Met Ala Ala Gln
 130 135 140

 Val Ala Ser Gly Met Ala Tyr Leu Glu Ser Arg Asn Tyr Ile His Arg
 145 150 155 160

 Asp Leu Ala Ala Arg Asn Val Leu Val Gly Glu His Asn Ile Tyr Lys
 165 170 175

 Val Ala Asp Phe Gly Leu Ala Arg Val Phe Lys Val Asp Asn Glu Asp
 180 185 190

 Ile Tyr Glu Ser Arg His Glu Ile Lys Leu Pro Val Lys Trp Thr Ala
 195 200 205

 Pro Glu Ala Ile Arg Ser Asn Lys Phe Ser Ile Lys Ser Asp Val Trp
 210 215 220

 Ser Phe Gly Ile Leu Leu Tyr Glu Ile Ile Thr Tyr Gly Lys Met Pro
 225 230 235 240

 Tyr Ser Gly Met Thr Gly Ala Gln Val Ile Gln Met Leu Ala Gln Asn
 245 250 255

 Tyr Arg Leu Pro Gln Pro Ser Asn Cys Pro Gln Gln Phe Tyr Asn Ile
 260 265 270

 Met Leu Glu Cys Trp Asn Ala Glu Pro Lys Glu Arg Pro Thr Phe Glu
 275 280 285

 Thr Leu Arg Trp Lys Leu Glu Asp Tyr Phe Glu Thr Asp Ser Ser Tyr
 290 295 300

 Ser Asp Ala Asn Asn Phe Ile Arg
 305 310

<210> 42
<211> 294
<212> PRT
<213> Homo sapiens

<400> 42
Thr Ser Asp Ala Asp Gly Leu Cys Thr Arg Leu Ile Lys Pro Lys Val
 1 5 10 15

Met Glu Gly Thr Val Ala Ala Gln Asp Glu Phe Tyr Arg Ser Gly Trp
 20 25 30

Ala Leu Asn Met Lys Glu Leu Lys Leu Leu Gln Thr Ile Gly Lys Gly
 35 40 45

Glu Phe Gly Asp Val Met Leu Gly Asp Tyr Arg Gly Asn Lys Val Ala
 50 55 60

Val Lys Cys Ile Lys Asn Asp Ala Thr Ala Gln Ala Phe Leu Ala Glu
 65 70 75 80

Ala Ser Val Met Thr Gln Leu Arg His Ser Asn Leu Val Gln Leu Leu
 85 90 95

Gly Val Ile Val Glu Glu Lys Gly Gly Leu Tyr Ile Val Thr Glu Tyr
 100 105 110

Met Ala Lys Gly Ser Leu Val Asp Tyr Leu Arg Ser Arg Gly Arg Ser
 115 120 125

Val Leu Gly Gly Asp Cys Leu Leu Lys Phe Ser Leu Asp Val Cys Glu
 130 135 140

Ala Met Glu Tyr Leu Glu Gly Asn Asn Phe Val His Arg Asp Leu Ala
 145 150 155 160

Ala Arg Asn Val Leu Val Ser Glu Asp Asn Val Ala Lys Val Ser Asp
 165 170 175

Phe Gly Leu Thr Lys Glu Ala Ser Ser Thr Gln Asp Thr Gly Lys Leu
 180 185 190

Pro Val Lys Trp Thr Ala Pro Glu Ala Leu Arg Glu Lys Lys Phe Ser
 195 200 205

Thr Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Trp Glu Ile Tyr
 210 215 220

Ser Phe Gly Arg Val Pro Tyr Pro Arg Ile Pro Leu Lys Asp Val Val
 225 230 235 240

Pro Arg Val Glu Lys Gly Tyr Lys Met Asp Ala Pro Asp Gly Cys Pro
 245 250 255

Pro Ala Val Tyr Glu Val Met Lys Asn Cys Trp His Leu Asp Ala Ala
 260 265 270

Met Arg Pro Ser Phe Leu Gln Leu Arg Glu Gln Leu Glu His Ile Lys
 275 280 285

Thr His Glu Leu His Leu
 290

<210> 43
 <211> 340
 <212> PRT
 <213> Homo sapiens

<400> 43
 Glu Arg Ala Asp Ser Glu Tyr Thr Asp Lys Leu Gln His Tyr Thr Ser
 1 5 10 15
 Gly His Met Thr Pro Gly Met Lys Ile Tyr Ile Asp Pro Phe Thr Tyr
 20 25 30
 Glu Asp Pro Asn Glu Ala Val Arg Glu Phe Ala Lys Glu Ile Asp Ile
 35 40 45
 Ser Cys Val Lys Ile Glu Gln Val Ile Gly Ala Gly Glu Phe Gly Glu
 50 55 60
 Val Cys Ser Gly His Leu Lys Leu Pro Gly Lys Arg Glu Ile Phe Val
 65 70 75 80
 Ala Ile Lys Thr Leu Lys Ser Gly Tyr Thr Glu Lys Gln Arg Arg Asp
 85 90 95
 Phe Leu Ser Glu Ala Ser Ile Met Gly Gln Phe Asp His Pro Asn Val
 100 105 110
 Ile His Leu Glu Gly Val Val Thr Lys Ser Thr Pro Val Met Ile Ile
 115 120 125
 Thr Glu Phe Met Glu Asn Gly Ser Leu Asp Ser Phe Leu Arg Gln Asn
 130 135 140
 Asp Gly Gln Phe Thr Val Ile Gln Leu Val Gly Met Leu Arg Gly Ile
 145 150 155 160
 Ala Ala Gly Met Lys Tyr Leu Ala Asp Met Asn Tyr Val His Arg Asp
 165 170 175
 Leu Ala Ala Arg Asn Ile Leu Val Asn Ser Asn Leu Val Cys Lys Val
 180 185 190
 Ser Asp Phe Gly Leu Ser Arg Phe Leu Glu Asp Asp Thr Ser Asp Pro
 195 200 205
 Thr Tyr Thr Ser Ala Leu Gly Gly Lys Ile Pro Ile Arg Trp Thr Ala
 210 215 220
 Pro Glu Ala Ile Gln Tyr Arg Lys Phe Thr Ser Ala Ser Asp Val Trp
 225 230 235 240
 Ser Tyr Gly Ile Val Met Trp Glu Val Met Ser Tyr Gly Glu Arg Pro
 245 250 255
 Tyr Trp Asp Met Thr Asn Gln Asp Val Ile Asn Ala Ile Glu Gln Asp
 260 265 270
 Tyr Arg Leu Pro Pro Pro Met Asp Cys Pro Ser Ala Leu His Gln Leu
 275 280 285
 Met Leu Asp Cys Trp Gln Lys Asp Arg Asn His Arg Pro Lys Phe Gly
 290 295 300

Gln Ile Val Asn Thr Leu Asp Lys Met Ile Arg Asn Pro Asn Ser Leu
 305 310 315 320

Lys Ala Met Ala Pro Leu Ser Ser Gly Ile Asn Leu Pro Leu Leu Asp
 325 330 335

Arg Thr Ile Pro
 340

<210> 44
 <211> 429
 <212> PRT
 <213> Homo sapiens

<400> 44
 Ile Ile Leu Arg Thr Val Lys Arg Ala Asn Gly Gly Glu Leu Lys Thr
 1 5 10 15

Gly Tyr Leu Ser Ile Val Met Asp Pro Asp Glu Leu Pro Leu Asp Glu
 20 25 30

His Cys Glu Arg Leu Pro Tyr Asp Ala Ser Lys Trp Glu Phe Pro Arg
 35 40 45

Asp Arg Leu Lys Leu Gly Lys Pro Leu Gly Arg Gly Ala Phe Gly Gln
 50 55 60

Val Ile Glu Ala Asp Ala Phe Gly Ile Asp Lys Thr Ala Thr Cys Arg
 65 70 75 80

Thr Val Ala Val Lys Met Leu Lys Glu Gly Ala Thr His Ser Glu His
 85 90 95

Arg Ala Leu Met Ser Glu Leu Lys Ile Leu Ile His Ile Gly His His
 100 105 110

Leu Asn Val Val Asn Leu Leu Gly Ala Cys Thr Lys Pro Gly Gly Pro
 115 120 125

Leu Met Val Ile Val Glu Phe Cys Lys Phe Gly Asn Leu Ser Thr Tyr
 130 135 140

Leu Arg Ser Lys Arg Asn Glu Phe Val Pro Tyr Lys Thr Lys Gly Ala
 145 150 155 160

Arg Phe Arg Gln Gly Lys Asp Tyr Val Gly Ala Ile Pro Val Asp Leu
 165 170 175

Lys Arg Arg Leu Asp Ser Ile Thr Ser Ser Gln Ser Ser Ala Ser Ser
 180 185 190

Gly Phe Val Glu Glu Lys Ser Leu Ser Asp Val Glu Glu Glu Ala
 195 200 205

Pro Glu Asp Leu Tyr Lys Asp Phe Leu Thr Leu Glu His Leu Ile Cys
 210 215 220

Tyr Ser Phe Gln Val Ala Lys Gly Met Glu Phe Leu Ala Ser Arg Lys
 225 230 235 240

Cys Ile His Arg Asp Leu Ala Ala Arg Asn Ile Leu Leu Ser Glu Lys
 245 250 255

Asn Val Val Lys Ile Cys Asp Phe Gly Leu Ala Arg Asp Ile Tyr Lys
 260 265 270

Asp Pro Asp Tyr Val Arg Lys Gly Asp Ala Arg Leu Pro Leu Lys Trp
 275 280 285

Met Ala Pro Glu Thr Ile Phe Asp Arg Val Tyr Thr Ile Gln Ser Asp
 290 295 300

Val Trp Ser Phe Gly Val Leu Leu Trp Glu Ile Phe Ser Leu Gly Ala
 305 310 315 320

Ser Pro Tyr Pro Gly Val Lys Ile Asp Glu Glu Phe Cys Arg Arg Leu
 325 330 335

Lys Glu Gly Thr Arg Met Arg Ala Pro Asp Tyr Thr Thr Pro Glu Met
 340 345 350

Tyr Gln Thr Met Leu Asp Cys Trp His Gly Glu Pro Ser Gln Arg Pro
 355 360 365

Thr Phe Ser Glu Leu Val Glu His Leu Gly Asn Leu Leu Gln Ala Asn
 370 375 380

Ala Gln Gln Asp Gly Lys Asp Tyr Ile Val Leu Pro Ile Ser Glu Thr
 385 390 395 400

Leu Ser Met Glu Glu Asp Ser Gly Leu Ser Leu Pro Thr Ser Pro Val
 405 410 415

Ser Cys Met Glu Glu Glu Val Cys Asp Pro Lys Phe
 420 425

<210> 45
 <211> 379
 <212> PRT
 <213> Homo sapiens

<400> 45
 Thr Val Ser Ala Asp Ser Ser Ala Ser Met Asn Ser Gly Val Leu Leu
 1 5 10 15

Val Arg Pro Ser Arg Leu Ser Ser Ser Gly Thr Pro Met Leu Ala Gly
 20 25 30

Val Ser Glu Tyr Glu Leu Pro Glu Asp Pro Arg Trp Glu Leu Pro Arg
 35 40 45

Asp Arg Leu Val Leu Gly Lys Pro Leu Gly Glu Gly Cys Phe Gly Gln
 50 55 60

Val Val Leu Ala Glu Ala Ile Gly Leu Asp Lys Asp Lys Pro Asn Arg
 65 70 75 80

 Val Thr Lys Val Ala Val Lys Met Leu Lys Ser Asp Ala Thr Glu Lys
 85 90 95

 Asp Leu Ser Asp Leu Ile Ser Glu Met Glu Met Met Lys Met Ile Gly
 100 105 110

 Lys His Lys Asn Ile Ile Asn Leu Leu Gly Ala Cys Thr Gln Asp Gly
 115 120 125

 Pro Leu Tyr Val Ile Val Glu Tyr Ala Ser Lys Gly Asn Leu Arg Glu
 130 135 140

 Tyr Leu Gln Ala Arg Arg Pro Pro Gly Leu Glu Tyr Cys Tyr Asn Pro
 145 150 155 160

 Ser His Asn Pro Glu Glu Gln Leu Ser Ser Lys Asp Leu Val Ser Cys
 165 170 175

 Ala Tyr Gln Val Ala Arg Gly Met Glu Tyr Leu Ala Ser Lys Lys Cys
 180 185 190

 Ile His Arg Asp Leu Ala Ala Arg Asn Val Leu Val Thr Glu Asp Asn
 195 200 205

 Val Met Lys Ile Ala Asp Phe Gly Leu Ala Arg Asp Ile His His Ile
 210 215 220

 Asp Tyr Tyr Lys Lys Thr Thr Asn Gly Arg Leu Pro Val Lys Trp Met
 225 230 235 240

 Ala Pro Glu Ala Leu Phe Asp Arg Ile Tyr Thr His Gln Ser Asp Val
 245 250 255

 Trp Ser Phe Gly Val Leu Leu Trp Glu Ile Phe Thr Leu Gly Gly Ser
 260 265 270

 Pro Tyr Pro Gly Val Pro Val Glu Glu Leu Phe Lys Leu Leu Lys Glu
 275 280 285

 Gly His Arg Met Asp Lys Pro Ser Asn Cys Thr Asn Glu Leu Tyr Met
 290 295 300

 Met Met Arg Asp Cys Trp His Ala Val Pro Ser Gln Arg Pro Thr Phe
 305 310 315 320

 Lys Gln Leu Val Glu Asp Leu Asp Arg Ile Val Ala Leu Thr Ser Asn
 325 330 335

 Gln Glu Tyr Leu Asp Leu Ser Met Pro Leu Asp Gln Tyr Ser Pro Ser
 340 345 350

 Phe Pro Asp Thr Arg Ser Ser Thr Cys Ser Ser Gly Glu Asp Ser Val
 355 360 365

Phe Ser His Glu Pro Leu Pro Glu Glu Pro Cys
 370 375

<210> 46
<211> 327
<212> PRT
<213> Homo sapiens

<400> 46
Met Glu Leu Arg Val Gly Asn Arg Tyr Arg Leu Gly Arg Lys Ile Gly
 1 5 10 15

Ser Gly Ser Phe Gly Asp Ile Tyr Leu Gly Thr Asp Ile Ala Ala Gly
 20 25 30

Glu Glu Val Ala Ile Lys Leu Glu Cys Val Lys Thr Lys His Pro Gln
 35 40 45

Leu His Ile Glu Ser Lys Ile Tyr Lys Met Met Gln Gly Gly Val Gly
 50 55 60

Ile Pro Thr Ile Arg Trp Cys Gly Ala Glu Gly Asp Tyr Asn Val Met
 65 70 75 80

Val Met Glu Leu Leu Gly Pro Ser Leu Glu Asp Leu Phe Asn Phe Cys
 85 90 95

Ser Arg Lys Phe Ser Leu Lys Thr Val Leu Leu Leu Ala Asp Gln Met
 100 105 110

Ile Ser Arg Ile Glu Tyr Ile His Ser Lys Asn Phe Ile His Arg Asp
 115 120 125

Val Lys Pro Asp Asn Phe Leu Met Gly Leu Gly Lys Lys Gly Asn Leu
 130 135 140

Val Tyr Ile Ile Asp Phe Gly Leu Ala Lys Lys Tyr Arg Asp Ala Arg
 145 150 155 160

Thr His Gln His Ile Pro Tyr Arg Glu Asn Lys Asn Leu Thr Gly Thr
 165 170 175

Ala Arg Tyr Ala Ser Ile Asn Thr His Leu Gly Ile Glu Gln Ser Arg
 180 185 190

Arg Asp Asp Leu Glu Ser Leu Gly Tyr Val Leu Met Tyr Phe Asn Leu
 195 200 205

Gly Ser Leu Pro Trp Gln Gly Leu Lys Ala Ala Thr Lys Arg Gln Lys
 210 215 220

Tyr Glu Arg Ile Ser Glu Lys Lys Met Ser Thr Pro Ile Glu Val Leu
 225 230 235 240

Cys Lys Gly Tyr Pro Ser Glu Phe Ala Thr Tyr Leu Asn Phe Cys Arg
 245 250 255

Ser Leu Arg Phe Asp Asp Lys Pro Asp Tyr Ser Tyr Leu Arg Gln Leu
 260 265 270
 Phe Arg Asn Leu Phe His Arg Gln Gly Phe Ser Tyr Asp Tyr Val Phe
 275 280 285
 Asp Trp Asn Met Leu Lys Phe Gly Ala Ser Arg Ala Ala Asp Asp Ala
 290 295 300
 Glu Arg Glu Arg Arg Asp Arg Glu Glu Arg Leu Arg His Ser Arg Asn
 305 310 315 320
 Pro Ala Thr Arg Gly Leu Pro
 325

<210> 47
 <211> 396
 <212> PRT
 <213> Homo sapiens

<400> 47
 Leu Asp Val Lys Ile Ala Phe Cys Gln Gly Phe Asp Lys Gln Val Asp
 1 5 10 15
 Val Ser Tyr Ile Ala Lys His Tyr Asn Met Ser Lys Ser Lys Val Asp
 20 25 30
 Asn Gln Phe Tyr Ser Val Glu Val Gly Asp Ser Thr Phe Thr Val Leu
 35 40 45
 Lys Arg Tyr Gln Asn Leu Lys Pro Ile Gly Ser Gly Ala Gln Gly Ile
 50 55 60
 Val Cys Ala Ala Tyr Asp Ala Val Leu Asp Arg Asn Val Ala Ile Lys
 65 70 75 80
 Lys Leu Ser Arg Pro Phe Gln Asn Gln Thr His Ala Lys Arg Ala Tyr
 85 90 95
 Arg Glu Leu Val Leu Met Lys Cys Val Asn His Lys Asn Ile Ile Ser
 100 105 110
 Leu Leu Asn Val Phe Thr Pro Gln Lys Thr Leu Glu Glu Phe Gln Asp
 115 120 125
 Val Tyr Leu Val Met Glu Leu Met Asp Ala Asn Leu Cys Gln Val Ile
 130 135 140
 Gln Met Glu Leu Asp His Glu Arg Met Ser Tyr Leu Leu Tyr Gln Met
 145 150 155 160
 Leu Cys Gly Ile Lys His Leu His Ser Ala Gly Ile Ile His Arg Asp
 165 170 175
 Leu Lys Pro Ser Asn Ile Val Val Lys Ser Asp Cys Thr Leu Lys Ile
 180 185 190

Leu Asp Phe Gly Leu Ala Arg Thr Ala Gly Thr Ser Phe Met Met Thr
 195 200 205
 Pro Tyr Val Val Thr Arg Tyr Tyr Arg Ala Pro Glu Val Ile Leu Gly
 210 215 220
 Met Gly Tyr Lys Glu Asn Val Asp Ile Trp Ser Val Gly Cys Ile Met
 225 230 235 240
 Gly Glu Met Val Arg His Lys Ile Leu Phe Pro Gly Arg Asp Tyr Ile
 245 250 255
 Asp Gln Trp Asn Lys Val Ile Glu Gln Leu Gly Thr Pro Cys Pro Glu
 260 265 270
 Phe Met Lys Lys Leu Gln Pro Thr Val Arg Asn Tyr Val Glu Asn Arg
 275 280 285
 Pro Lys Tyr Ala Gly Leu Thr Phe Pro Lys Leu Phe Pro Asp Ser Leu
 290 295 300
 Phe Pro Ala Asp Ser Glu His Asn Lys Leu Lys Ala Ser Gln Ala Arg
 305 310 315 320
 Asp Leu Leu Ser Lys Met Leu Val Ile Asp Pro Ala Lys Arg Ile Ser
 325 330 335
 Val Asp Asp Ala Leu Gln His Pro Tyr Ile Asn Val Trp Tyr Asp Pro
 340 345 350
 Ala Glu Val Glu Ala Pro Pro Gln Ile Tyr Asp Lys Gln Leu Asp
 355 360 365
 Glu Arg Glu His Thr Ile Glu Glu Trp Lys Glu Leu Ile Tyr Lys Glu
 370 375 380
 Val Met Asn Ser Glu Glu Lys Thr Lys Asn Gly Val
 385 390 395

 <210> 48
 <211> 326
 <212> PRT
 <213> Homo sapiens

 <400> 48
 Ser Pro Ile Ser Pro Thr Glu Asn Asn Thr Thr Pro Pro Asp Ala Leu
 1 5 10 15
 Thr Arg Asn Thr Glu Lys Gln Lys Lys Pro Lys Met Ser Asp Glu
 20 25 30
 Glu Ile Leu Glu Lys Leu Arg Ser Ile Val Ser Val Gly Asp Pro Lys
 35 40 45
 Lys Lys Tyr Thr Arg Phe Glu Lys Ile Gly Gln Gly Ala Ser Gly Thr
 50 55 60

Val Tyr Thr Ala Met Asp Val Ala Thr Gly Gln Glu Val Ala Ile Lys
 65 70 75 80

 Gln Met Asn Leu Gln Gln Pro Lys Lys Glu Leu Ile Ile Asn Glu
 85 90 95

 Ile Leu Val Met Arg Glu Asn Lys Asn Pro Asn Ile Val Asn Tyr Leu
 100 105 110

 Asp Ser Tyr Leu Val Gly Asp Glu Leu Trp Val Val Met Glu Tyr Leu
 115 120 125

 Ala Gly Gly Ser Leu Thr Asp Val Val Thr Glu Thr Cys Met Asp Glu
 130 135 140

 Gly Gln Ile Ala Ala Val Cys Arg Glu Cys Leu Gln Ala Leu Glu Phe
 145 150 155 160

 Leu His Ser Asn Gln Val Ile His Arg Asp Ile Lys Ser Asp Asn Ile
 165 170 175

 Leu Leu Gly Met Asp Gly Ser Val Lys Leu Thr Asp Phe Gly Phe Cys
 180 185 190

 Ala Gln Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr
 195 200 205

 Pro Tyr Trp Met Ala Pro Glu Val Val Thr Arg Lys Ala Tyr Gly Pro
 210 215 220

 Lys Val Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Ile Glu
 225 230 235 240

 Gly Glu Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu
 245 250 255

 Ile Ala Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser
 260 265 270

 Ala Ile Phe Arg Asp Phe Leu Asn Arg Cys Leu Asp Met Asp Val Glu
 275 280 285

 Lys Arg Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe Leu Lys Ile
 290 295 300

 Ala Lys Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala Ala Lys Glu
 305 310 315 320

 Ala Thr Lys Asn Asn His
 325

<210> 49
 <211> 349
 <212> PRT
 <213> Homo sapiens

<400> 49
 His His Arg Val Pro Asn Glu Glu Asp Pro Ser Leu Asp Arg Pro Phe
 1 5 10 15
 Ile Ser Glu Gly Thr Thr Leu Lys Asp Leu Ile Tyr Asp Met Thr Thr
 20 25 30
 Ser Gly Ser Gly Ser Gly Leu Pro Leu Leu Val Gln Arg Thr Ile Ala
 35 40 45
 Arg Thr Ile Val Leu Gln Glu Ser Ile Gly Lys Gly Arg Phe Gly Glu
 50 55 60
 Val Trp Arg Gly Lys Trp Arg Gly Glu Glu Val Ala Val Lys Ile Phe
 65 70 75 80
 Ser Ser Arg Glu Glu Arg Ser Trp Phe Arg Glu Ala Glu Ile Tyr Gln
 85 90 95
 Thr Val Met Leu Arg His Glu Asn Ile Leu Gly Phe Ile Ala Ala Asp
 100 105 110
 Asn Lys Asp Asn Gly Thr Trp Thr Gln Leu Trp Leu Val Ser Asp Tyr
 115 120 125
 His Glu His Gly Ser Leu Phe Asp Tyr Leu Asn Arg Tyr Thr Val Thr
 130 135 140
 Val Glu Gly Met Ile Lys Leu Ala Leu Ser Thr Ala Ser Gly Leu Ala
 145 150 155 160
 His Leu His Met Glu Ile Val Gly Thr Gln Gly Lys Pro Ala Ile Ala
 165 170 175
 His Arg Asp Leu Lys Ser Lys Asn Ile Leu Val Lys Lys Asn Gly Thr
 180 185 190
 Cys Cys Ile Ala Asp Leu Gly Leu Ala Val Arg His Asp Ser Ala Thr
 195 200 205
 Asp Thr Ile Asp Ile Ala Pro Asn His Arg Val Gly Thr Lys Arg Tyr
 210 215 220
 Met Ala Pro Glu Val Leu Asp Asp Ser Ile Asn Met Lys His Phe Glu
 225 230 235 240
 Ser Phe Lys Arg Ala Asp Ile Tyr Ala Met Gly Leu Val Phe Trp Glu
 245 250 255
 Ile Ala Arg Arg Cys Ser Ile Gly Gly Ile His Glu Asp Tyr Gln Leu
 260 265 270
 Pro Tyr Tyr Asp Leu Val Pro Ser Asp Pro Ser Val Glu Glu Met Arg
 275 280 285
 Lys Val Val Cys Glu Gln Lys Leu Arg Pro Asn Ile Pro Asn Arg Trp
 290 295 300

Gln Ser Cys Glu Ala Leu Arg Val Met Ala Lys Ile Met Arg Glu Cys
 305 310 315 320
 Trp Tyr Ala Asn Gly Ala Ala Arg Leu Thr Ala Leu Arg Ile Lys Lys
 325 330 335
 Thr Leu Ser Gln Leu Ser Gln Gln Glu Gly Ile Lys Met
 340 345

<210> 50
 <211> 370
 <212> PRT
 <213> Homo sapiens

<400> 50
 Gly Ser Ile Tyr Leu Phe Leu Arg Lys Arg Gln Pro Asp Gly Pro Leu
 1 5 10 15

Gly Pro Leu Tyr Ala Ser Ser Asn Pro Glu Tyr Leu Ser Ala Ser Asp
 20 25 30

Val Phe Pro Cys Ser Val Tyr Val Pro Asp Glu Trp Glu Val Ser Arg
 35 40 45

Glu Lys Ile Thr Leu Leu Arg Glu Leu Gly Gln Gly Ser Phe Gly Met
 50 55 60

Val Tyr Glu Gly Asn Ala Arg Asp Ile Ile Lys Gly Glu Ala Glu Thr
 65 70 75 80

Arg Val Ala Val Lys Thr Val Asn Glu Ser Ala Ser Leu Arg Glu Arg
 85 90 95

Ile Glu Phe Leu Asn Glu Ala Ser Val Met Lys Gly Phe Thr Cys His
 100 105 110

His Val Val Arg Leu Leu Gly Val Val Ser Lys Gly Gln Pro Thr Leu
 115 120 125

Val Val Met Glu Leu Met Ala His Gly Asp Leu Lys Ser Tyr Leu Arg
 130 135 140

Ser Leu Arg Pro Glu Ala Glu Asn Asn Pro Gly Arg Pro Pro Pro Thr
 145 150 155 160

Leu Gln Glu Met Ile Gln Met Ala Ala Glu Ile Ala Asp Gly Met Ala
 165 170 175

Tyr Leu Asn Ala Lys Lys Phe Val His Arg Asp Leu Ala Ala Arg Asn
 180 185 190

Cys Met Val Ala His Asp Phe Thr Val Lys Ile Gly Asp Phe Gly Met
 195 200 205

Thr Arg Asp Ile Tyr Glu Thr Asp Tyr Tyr Arg Lys Gly Gly Lys Gly
 210 215 220

Leu Leu Pro Val Arg Trp Met Ala Pro Glu Ser Leu Lys Asp Gly Val
 225 230 235 240

Phe Thr Thr Ser Ser Asp Met Trp Ser Phe Gly Val Val Leu Trp Glu
 245 250 255

Ile Thr Ser Leu Ala Glu Gln Pro Tyr Gln Gly Leu Ser Asn Glu Gln
 260 265 270

Val Leu Lys Phe Val Met Asp Gly Gly Tyr Leu Asp Gln Pro Asp Asn
 275 280 285

Cys Pro Glu Arg Val Thr Asp Leu Met Arg Met Cys Trp Gln Phe Asn
 290 295 300

Pro Lys Met Arg Pro Thr Phe Leu Glu Ile Val Asn Leu Leu Lys Asp
 305 310 315 320

Asp Leu His Pro Ser Phe Pro Glu Val Ser Phe Phe His Ser Glu Glu
 325 330 335

Asn Lys Ala Pro Glu Ser Glu Glu Leu Glu Met Glu Phe Glu Asp Met
 340 345 350

Glu Asn Val Pro Leu Asp Arg Ser Ser His Cys Gln Arg Glu Glu Ala
 355 360 365

Gly Gly
 370

<210> 51
 <211> 298
 <212> PRT
 <213> Homo sapiens

<400> 51
 Met Glu Asn Phe Gln Lys Val Glu Lys Ile Gly Glu Gly Thr Tyr Gly
 1 5 10 15

Val Val Tyr Lys Ala Arg Asn Lys Leu Thr Gly Glu Val Val Ala Leu
 20 25 30

Lys Lys Ile Arg Leu Asp Thr Glu Thr Glu Gly Val Pro Ser Thr Ala
 35 40 45

Ile Arg Glu Ile Ser Leu Leu Lys Glu Leu Asn His Pro Asn Ile Val
 50 55 60

Lys Leu Leu Asp Val Ile His Thr Glu Asn Lys Leu Tyr Leu Val Phe
 65 70 75 80

Glu Phe Leu His Gln Asp Leu Lys Lys Phe Met Asp Ala Ser Ala Leu
 85 90 95

Thr Gly Ile Pro Leu Pro Leu Ile Lys Ser Tyr Leu Phe Gln Leu Leu
 100 105 110

Gln Gly Leu Ala Phe Cys His Ser His Arg Val Leu His Arg Asp Leu
 115 120 125

 Lys Pro Gln Asn Leu Leu Ile Asn Thr Glu Gly Ala Ile Lys Leu Ala
 130 135 140

 Asp Phe Gly Leu Ala Arg Ala Phe Gly Val Pro Val Arg Thr Tyr Thr
 145 150 155 160

 His Glu Val Val Thr Leu Trp Tyr Arg Ala Pro Glu Ile Leu Leu Gly
 165 170 175

 Cys Lys Tyr Tyr Ser Thr Ala Val Asp Ile Trp Ser Leu Gly Cys Ile
 180 185 190

 Phe Ala Glu Met Val Thr Arg Arg Ala Leu Phe Pro Gly Asp Ser Glu
 195 200 205

 Ile Asp Gln Leu Phe Arg Ile Phe Arg Thr Leu Gly Thr Pro Asp Glu
 210 215 220

 Val Val Trp Pro Gly Val Thr Ser Met Pro Asp Tyr Lys Pro Ser Phe
 225 230 235 240

 Pro Lys Trp Ala Arg Gln Asp Phe Ser Lys Val Val Pro Pro Leu Asp
 245 250 255

 Glu Asp Gly Arg Ser Leu Leu Ser Gln Met Leu His Tyr Asp Pro Asn
 260 265 270

 Lys Arg Ile Ser Ala Lys Ala Ala Leu Ala His Pro Phe Phe Gln Asp
 275 280 285

 Val Thr Lys Pro Val Pro His Leu Arg Leu
 290 295

<210> 52
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 52
 Met Glu Lys Asp Gly Leu Cys Arg Ala Asp Gln Gln Tyr Glu Cys Val
 1 5 10 15

 Ala Glu Ile Gly Glu Gly Ala Tyr Gly Lys Val Phe Lys Ala Arg Asp
 20 25 30

 Leu Lys Asn Gly Gly Arg Phe Val Ala Leu Lys Arg Val Arg Val Gln
 35 40 45

 Thr Gly Glu Glu Gly Met Pro Leu Ser Thr Ile Arg Glu Val Ala Val
 50 55 60

 Leu Arg His Leu Glu Thr Phe Glu His Pro Asn Val Val Arg Leu Phe
 65 70 75 80

Asp Val Cys Thr Val Ser Arg Thr Asp Arg Glu Thr Lys Leu Thr Leu
 85 90 95

Val Phe Glu His Val Asp Gln Asp Leu Thr Thr Tyr Leu Asp Lys Val
 100 105 110

Pro Glu Pro Gly Val Pro Thr Glu Thr Ile Lys Asp Met Met Phe Gln
 115 120 125

Leu Leu Arg Gly Leu Asp Phe Leu His Ser His Arg Val Val His Arg
 130 135 140

Asp Leu Lys Pro Gln Asn Ile Leu Val Thr Ser Ser Gly Gln Ile Lys
 145 150 155 160

Leu Ala Asp Phe Gly Leu Ala Arg Ile Tyr Ser Phe Gln Met Ala Leu
 165 170 175

Thr Ser Val Val Val Thr Leu Trp Tyr Arg Ala Pro Glu Val Leu Leu
 180 185 190

Gln Ser Ser Tyr Ala Thr Pro Val Asp Leu Trp Ser Val Gly Cys Ile
 195 200 205

Phe Ala Glu Met Phe Arg Arg Lys Pro Leu Phe Arg Gly Ser Ser Asp
 210 215 220

Val Asp Gln Leu Gly Lys Ile Leu Asp Val Ile Gly Leu Pro Gly Glu
 225 230 235 240

Glu Asp Trp Pro Arg Asp Val Ala Leu Pro Arg Gln Ala Phe His Ser
 245 250 255

Lys Ser Ala Gln Pro Ile Glu Lys Phe Val Thr Asp Ile Asp Glu Leu
 260 265 270

Gly Lys Asp Leu Leu Lys Cys Leu Thr Phe Asn Pro Ala Lys Arg
 275 280 285

Ile Ser Ala Tyr Ser Ala Leu Ser His Pro Tyr Phe Gln Asp Leu Glu
 290 295 300

Arg Cys Lys Glu Asn Leu Asp Ser His Leu Pro Pro Ser Gln Asn Thr
 305 310 315 320

Ser Glu Leu Asn Thr Ala
 325

<210> 53
 <211> 385
 <212> PRT
 <213> Homo sapiens

<400> 53
 Arg Thr Thr Ser Phe Ala Glu Ser Cys Lys Pro Val Gln Gln Pro Ser
 1 5 10 15

Ala Phe Gly Ser Met Lys Val Ser Arg Asp Lys Asp Gly Ser Lys Val
 20 25 30

Thr Thr Val Val Ala Thr Pro Gly Gln Gly Pro Asp Arg Pro Gln Glu
 35 40 45

Val Ser Tyr Thr Asp Thr Lys Val Ile Gly Asn Gly Ser Phe Gly Val
 50 55 60

Val Tyr Gln Ala Lys Leu Cys Asp Ser Gly Glu Leu Val Ala Ile Lys
 65 70 75 80

Lys Val Leu Gln Asp Lys Arg Phe Lys Asn Arg Glu Leu Gln Ile Met
 85 90 95

Arg Lys Leu Asp His Cys Asn Ile Val Arg Leu Arg Tyr Phe Phe Tyr
 100 105 110

Ser Ser Gly Glu Lys Lys Asp Glu Val Tyr Leu Asn Leu Val Leu Asp
 115 120 125

Tyr Val Pro Glu Thr Val Tyr Arg Val Ala Arg His Tyr Ser Arg Ala
 130 135 140

Lys Gln Thr Leu Pro Val Ile Tyr Val Lys Leu Tyr Met Tyr Gln Leu
 145 150 155 160

Phe Arg Ser Leu Ala Tyr Ile His Ser Phe Gly Ile Cys His Arg Asp
 165 170 175

Ile Lys Pro Gln Asn Leu Leu Asp Pro Asp Thr Ala Val Leu Lys
 180 185 190

Leu Cys Asp Phe Gly Ser Ala Lys Gln Leu Val Arg Gly Glu Pro Asn
 195 200 205

Val Ser Tyr Ile Cys Ser Arg Tyr Tyr Arg Ala Pro Glu Leu Ile Phe
 210 215 220

Gly Ala Thr Asp Tyr Thr Ser Ser Ile Asp Val Trp Ser Ala Gly Cys
 225 230 235 240

Val Leu Ala Glu Leu Leu Gly Gln Pro Ile Phe Pro Gly Asp Ser
 245 250 255

Gly Val Asp Gln Leu Val Glu Ile Ile Lys Val Leu Gly Thr Pro Thr
 260 265 270

Arg Glu Gln Ile Arg Glu Met Asn Pro Asn Tyr Thr Glu Phe Lys Phe
 275 280 285

Pro Gln Ile Lys Ala His Pro Trp Thr Lys Val Phe Arg Pro Arg Thr
 290 295 300

Pro Pro Glu Ala Ile Ala Leu Cys Ser Arg Leu Leu Glu Tyr Thr Pro
 305 310 315 320

Thr Ala Arg Leu Thr Pro Leu Glu Ala Cys Ala His Ser Phe Phe Asp
 325 330 335

Glu Leu Arg Asp Pro Asn Val Lys His Pro Asn Gly Arg Asp Thr Pro
 340 345 350

Ala Leu Phe Asn Phe Thr Thr Gln Glu Leu Ser Ser Asn Pro Pro Leu
 355 360 365

Ala Thr Ile Leu Ile Pro Pro His Ala Arg Ile Gln Ala Ala Ala Ser
 370 375 380

Thr
 385

<210> 54

<211> 298

<212> PRT

<213> Homo sapiens

<400> 54

Met Gly Asn Ala Ala Ala Lys Lys Gly Ser Glu Gln Glu Ser Val
 1 5 10 15

Lys Glu Phe Leu Ala Lys Ala Lys Glu Asp Phe Leu Lys Lys Trp Glu
 20 25 30

Ser Pro Ala Gln Asn Thr Ala His Leu Asp Gln Phe Glu Arg Ile Lys
 35 40 45

Thr Leu Gly Thr Gly Ser Phe Gly Arg Val Met Leu Val Lys His Lys
 50 55 60

Glu Thr Gly Asn His Tyr Ala Met Lys Ile Leu Asp Lys Gln Lys Val
 65 70 75 80

Val Lys Leu Lys Gln Ile Glu His Thr Leu Asn Glu Lys Arg Ile Leu
 85 90 95

Gln Ala Val Asn Phe Pro Phe Leu Val Lys Leu Glu Phe Ser Phe Lys
 100 105 110

Asp Asn Ser Asn Leu Tyr Met Val Met Glu Tyr Val Pro Gly Gly Glu
 115 120 125

Met Phe Ser His Leu Arg Arg Ile Gly Arg Phe Ser Glu Pro His Ala
 130 135 140

Arg Phe Tyr Ala Ala Gln Ile Val Leu Thr Phe Glu Tyr Leu His Ser
 145 150 155 160

Leu Asp Leu Ile Tyr Arg Asp Leu Lys Pro Glu Asn Leu Leu Ile Asp
 165 170 175

Gln Gln Gly Tyr Ile Gln Val Thr Asp Phe Gly Phe Ala Lys Arg Val
 180 185 190

Lys Gly Arg Thr Trp Thr Leu Cys Gly Thr Pro Glu Tyr Leu Ala Pro
 195 200 205

Glu Ile Ile Leu Ser Lys Gly Tyr Asn Lys Ala Val Asp Trp Trp Ala
 210 215 220

Leu Gly Val Leu Ile Tyr Glu Met Ala Ala Gly Tyr Pro Pro Phe Phe
 225 230 235 240

Ala Asp Gln Pro Ile Gln Ile Tyr Glu Lys Ile Val Ser Gly Lys Val
 245 250 255

Arg Phe Pro Ser His Phe Ser Ser Asp Leu Lys Asp Leu Leu Arg Asn
 260 265 270

Leu Leu Gln Val Asp Leu Thr Lys Arg Phe Gly Asn Leu Lys Asn Gly
 275 280 285

Val Asn Asp Ile Lys Asn His Lys Trp Phe
 290 295

<210> 55

<211> 326

<212> PRT

<213> Homo sapiens

<400> 55

Met Leu Gly Ala Val Glu Gly Pro Arg Trp Lys Gln Ala Glu Asp Ile
 1 5 10 15

Arg Asp Ile Tyr Asp Phe Arg Asp Val Leu Gly Thr Gly Ala Phe Ser
 20 25 30

Glu Val Ile Leu Ala Glu Asp Lys Arg Thr Gln Lys Leu Val Ala Ile
 35 40 45

Lys Cys Ile Ala Lys Glu Ala Leu Glu Gly Lys Glu Gly Ser Met Glu
 50 55 60

Asn Glu Ile Ala Val Leu His Ile Lys His Pro Asn Ile Val Ala
 65 70 75 80

Leu Asp Asp Ile Tyr Glu Ser Gly Gly His Leu Tyr Leu Ile Met Gln
 85 90 95

Leu Val Ser Gly Gly Glu Leu Phe Asp Arg Ile Val Glu Lys Gly Phe
 100 105 110

Tyr Thr Glu Arg Asp Ala Ser Arg Leu Ile Phe Gln Val Leu Asp Ala
 115 120 125

Val Lys Tyr Leu His Asp Leu Gly Ile Val His Arg Asp Leu Lys Pro
 130 135 140

Glu Asn Leu Leu Tyr Tyr Ser Leu Asp Glu Asp Ser Lys Ile Met Ile
 145 150 155 160

Ser Asp Phe Gly Leu Ser Lys Met Glu Asp Pro Gly Ser Val Leu Ser
 165 170 175

 Thr Ala Cys Gly Thr Pro Gly Tyr Val Ala Pro Glu Val Leu Ala Gln
 180 185 190

 Lys Pro Tyr Ser Lys Ala Val Asp Cys Trp Ser Ile Gly Val Ile Ala
 195 200 205

 Tyr Ile Leu Leu Cys Gly Tyr Pro Pro Phe Tyr Asp Glu Asn Asp Ala
 210 215 220

 Lys Leu Phe Glu Gln Ile Leu Lys Ala Glu Tyr Glu Phe Asp Ser Pro
 225 230 235 240

 Tyr Trp Asp Asp Ile Ser Asp Ser Ala Lys Asp Phe Ile Arg His Leu
 245 250 255

 Met Glu Lys Asp Pro Glu Lys Arg Phe Thr Cys Glu Gln Ala Leu Gln
 260 265 270

 His Pro Trp Ile Ala Gly Asp Thr Ala Leu Asp Lys Asn Ile His Gln
 275 280 285

 Ser Val Ser Glu Gln Ile Lys Lys Asn Phe Ala Lys Ser Lys Trp Lys
 290 295 300

 Gln Ala Phe Asn Ala Thr Ala Val Val Arg His Met Arg Lys Leu Gln
 305 310 315 320

 Leu Gly Thr Ser Gln Glu
 325

<210> 56
 <211> 360
 <212> PRT
 <213> Homo sapiens

<400> 56
 Met Ala Ala Ala Ala Ala Gly Ala Gly Pro Glu Met Val Arg Gly
 1 5 10 15

 Gln Val Phe Asp Val Gly Pro Arg Tyr Thr Asn Leu Ser Tyr Ile Gly
 20 25 30

 Glu Gly Ala Tyr Gly Met Val Cys Ser Ala Tyr Asp Asn Val Asn Lys
 35 40 45

 Val Arg Val Ala Ile Lys Lys Ile Ser Pro Phe Glu His Gln Thr Tyr
 50 55 60

 Cys Gln Arg Thr Leu Arg Glu Ile Lys Ile Leu Leu Arg Phe Arg His
 65 70 75 80

 Glu Asn Ile Ile Gly Ile Asn Asp Ile Ile Arg Ala Pro Thr Ile Glu
 85 90 95

Gln Met Lys Asp Val Tyr Ile Val Gln Asp Leu Met Glu Thr Asp Leu
 100 105 110
 Tyr Lys Leu Leu Lys Thr Gln His Leu Ser Asn Asp His Ile Cys Tyr
 115 120 125
 Phe Leu Tyr Gln Ile Leu Arg Gly Leu Lys Tyr Ile His Ser Ala Asn
 130 135 140
 Val Leu His Arg Asp Leu Lys Pro Ser Asn Leu Leu Leu Asn Thr Thr
 145 150 155 160
 Cys Asp Leu Lys Ile Cys Asp Phe Gly Leu Ala Arg Val Ala Asp Pro
 165 170 175
 Asp His Asp His Thr Gly Phe Leu Thr Glu Tyr Val Ala Thr Arg Trp
 180 185 190
 Tyr Arg Ala Pro Glu Ile Met Leu Asn Ser Lys Gly Tyr Thr Lys Ser
 195 200 205
 Ile Asp Ile Trp Ser Val Gly Cys Ile Leu Ala Glu Met Leu Ser Asn
 210 215 220
 Arg Pro Ile Phe Pro Gly Lys His Tyr Leu Asp Gln Leu Lys His Ile
 225 230 235 240
 Leu Gly Ile Leu Gly Ser Pro Ser Gln Glu Asp Leu Asn Cys Ile Ile
 245 250 255
 Asn Leu Lys Ala Arg Asn Tyr Leu Leu Ser Leu Pro His Lys Asn Lys
 260 265 270
 Val Pro Trp Asn Arg Leu Phe Pro Asn Ala Asp Ser Lys Ala Leu Asp
 275 280 285
 Leu Leu Asp Lys Met Leu Thr Phe Asn Pro His Lys Arg Ile Glu Val
 290 295 300
 Glu Gln Ala Leu Ala His Pro Tyr Leu Glu Gln Tyr Tyr Asp Pro Ser
 305 310 315 320
 Asp Glu Pro Ile Ala Glu Ala Pro Phe Lys Phe Asp Met Glu Leu Asp
 325 330 335
 Asp Leu Pro Lys Glu Lys Leu Lys Glu Leu Ile Phe Glu Glu Thr Ala
 340 345 350
 Arg Phe Gln Pro Gly Tyr Arg Ser
 355 360

<210> 57
<211> 343
<212> PRT
<213> *Homo sapiens*

<400> 57
 Ser Thr Val Ala Asp Gly Leu Ile Thr Thr Leu His Tyr Pro Ala Pro
 1 5 10 15
 Lys Arg Asn Lys Pro Thr Val Tyr Gly Val Ser Pro Asn Tyr Asp Lys
 20 25 30
 Trp Glu Met Glu Arg Thr Asp Ile Thr Met Lys His Lys Leu Gly Gly
 35 40 45
 Gly Gln Tyr Gly Glu Val Tyr Glu Gly Val Trp Lys Lys Tyr Ser Leu
 50 55 60
 Thr Val Ala Val Lys Thr Leu Lys Glu Asp Thr Met Glu Val Glu Glu
 65 70 75 80
 Phe Leu Lys Glu Ala Ala Val Met Lys Glu Ile Lys His Pro Asn Leu
 85 90 95
 Val Gln Leu Leu Gly Val Cys Thr Arg Glu Pro Pro Phe Tyr Ile Ile
 100 105 110
 ,
 Thr Glu Phe Met Thr Tyr Gly Asn Leu Leu Asp Tyr Leu Arg Glu Cys
 115 120 125
 ,
 Asn Arg Gln Glu Val Asn Ala Val Val Leu Leu Tyr Met Ala Thr Gln
 130 135 140
 Ile Ser Ser Ala Met Glu Tyr Leu Glu Lys Lys Asn Phe Ile His Arg
 145 150 155 160
 Asp Leu Ala Ala Arg Asn Cys Leu Val Gly Glu Asn His Leu Val Lys
 165 170 175
 Val Ala Asp Phe Gly Leu Ser Arg Leu Met Thr Gly Asp Thr Tyr Thr
 180 185 190
 Ala His Ala Gly Ala Lys Phe Pro Ile Lys Trp Thr Ala Pro Glu Ser
 195 200 205
 Leu Ala Tyr Asn Lys Phe Ser Ile Lys Ser Asp Val Trp Ala Phe Gly
 210 215 220
 Val Leu Leu Trp Glu Ile Ala Thr Tyr Gly Met Ser Pro Tyr Pro Gly
 225 230 235 240
 Ile Asp Leu Ser Gln Val Tyr Glu Leu Leu Glu Lys Asp Tyr Arg Met
 245 250 255
 Glu Arg Pro Glu Gly Cys Pro Glu Lys Val Tyr Glu Leu Met Arg Ala
 260 265 270
 Cys Trp Gln Trp Asn Pro Ser Asp Arg Pro Ser Phe Ala Glu Ile His
 275 280 285
 Gln Ala Phe Glu Thr Met Phe Gln Glu Ser Ser Ile Ser Asp Glu Val
 290 295 300

Glu Lys Glu Leu Gly Lys Gln Gly Val Arg Gly Ala Val Ser Thr Leu
 305 310 315 320

Leu Gln Ala Pro Glu Leu Pro Thr Lys Thr Arg Thr Ser Arg Arg Ala
 325 330 335

Ala Glu His Arg Asp Thr Thr
 340

<210> 58
 <211> 351
 <212> PRT
 <213> Homo sapiens

<400> 58
 Arg Ala Asn Val Gln Arg Arg Met Ala Gln Ala Phe Gln Asn Val Arg
 1 5 10 15

Glu Glu Pro Ala Val Gln Phe Asn Ser Gly Thr Leu Ala Leu Asn Arg
 20 25 30

Lys Val Lys Asn Asn Pro Asp Pro Thr Ile Tyr Pro Val Leu Asp Trp
 35 40 45

Asn Asp Ile Lys Phe Gln Asp Val Ile Gly Glu Gly Asn Phe Gly Gln
 50 55 60

Val Leu Lys Ala Arg Ile Lys Asp Gly Leu Arg Met Asp Ala Ala
 65 70 75 80

Ile Lys Arg Met Lys Glu Tyr Ala Ser Lys Asp Asp His Arg Asp Phe
 85 90 95

Ala Gly Glu Leu Glu Val Leu Cys Lys Leu Gly His His Pro Asn Ile
 100 105 110

Ile Asn Leu Leu Gly Ala Cys Glu His Arg Gly Tyr Leu Tyr Leu Ala
 115 120 125

Ile Glu Tyr Ala Pro His Gly Asn Leu Leu Asp Phe Leu Arg Lys Ser
 130 135 140

Arg Val Leu Glu Thr Asp Pro Ala Phe Ala Ile Ala Asn Ser Thr Ala
 145 150 155 160

Ser Thr Leu Ser Ser Gln Gln Leu Leu His Phe Ala Ala Asp Val Ala
 165 170 175

Arg Gly Met Asp Tyr Leu Ser Gln Lys Gln Phe Ile His Arg Asp Leu
 180 185 190

Ala Ala Arg Asn Ile Leu Val Gly Glu Asn Tyr Val Ala Lys Ile Ala
 195 200 205

Asp Phe Gly Leu Ser Arg Gly Gln Glu Val Tyr Val Lys Lys Thr Met
 210 215 220

Gly Arg Leu Pro Val Arg Trp Met Ala Ile Glu Ser Leu Asn Tyr Ser
 225 230 235 240
 Val Tyr Thr Thr Asn Ser Asp Val Trp Ser Tyr Gly Val Leu Leu Trp
 245 250 255
 Glu Ile Val Ser Leu Gly Gly Thr Pro Tyr Cys Gly Met Thr Cys Ala
 260 265 270
 Glu Leu Tyr Glu Lys Leu Pro Gln Gly Tyr Arg Leu Glu Lys Pro Leu
 275 280 285
 Asn Cys Asp Asp Glu Val Tyr Asp Leu Met Arg Gln Cys Trp Arg Glu
 290 295 300
 Lys Pro Tyr Glu Arg Pro Ser Phe Ala Gln Ile Leu Val Ser Leu Asn
 305 310 315 320
 Arg Met Leu Glu Glu Arg Lys Thr Tyr Val Asn Thr Thr Leu Tyr Glu
 325 330 335
 Lys Phe Thr Tyr Ala Gly Ile Asp Cys Ser Ala Glu Glu Ala Ala
 340 345 350

<210> 59
 <211> 349
 <212> PRT
 <213> Homo sapiens

<400> 59
 Glu Pro Ser Glu Pro Thr Ile Thr Lys Glu Asp Lys Thr Arg Ala Met
 1 5 10 15
 Asn Tyr Asp Glu Glu Val Asp Glu Thr Arg Glu Val Ser Met Thr Lys
 20 25 30
 Ala Ser His Ser Ser Thr Lys Glu Leu Tyr Glu Lys Tyr Met Ile Ala
 35 40 45
 Glu Asp Leu Gly Arg Gly Glu Phe Gly Ile Val His Arg Cys Val Glu
 50 55 60
 Thr Ser Ser Lys Lys Thr Tyr Met Ala Lys Phe Val Lys Val Lys Gly
 65 70 75 80
 Thr Asp Gln Val Leu Val Lys Lys Glu Ile Ser Ile Leu Asn Ile Ala
 85 90 95
 Arg His Arg Asn Ile Leu His Leu His Glu Ser Phe Glu Ser Met Glu
 100 105 110
 Glu Leu Val Met Ile Phe Glu Phe Ile Ser Gly Leu Asp Ile Phe Glu
 115 120 125
 Arg Ile Asn Thr Ser Ala Phe Glu Leu Asn Glu Arg Glu Ile Val Ser
 130 135 140

Tyr Val His Gln Val Cys Glu Ala Leu Gln Phe Leu His Ser His Asn
 145 150 155 160
 Ile Gly His Phe Asp Ile Arg Pro Glu Asn Ile Ile Tyr Gln Thr Arg
 165 170 175
 Arg Ser Ser Thr Ile Lys Ile Glu Phe Gly Gln Ala Arg Gln Leu
 180 185 190
 Lys Pro Gly Asp Asn Phe Arg Leu Leu Phe Thr Ala Pro Glu Tyr Tyr
 195 200 205
 Ala Pro Glu Val His Gln His Asp Val Val Ser Thr Ala Thr Asp Met
 210 215 220
 Trp Ser Leu Gly Thr Leu Val Tyr Val Leu Leu Ser Gly Ile Asn Pro
 225 230 235 240
 Phe Leu Ala Glu Thr Asn Gln Gln Ile Ile Glu Asn Ile Met Asn Ala
 245 250 255
 Glu Tyr Thr Phe Asp Glu Glu Ala Phe Lys Glu Ile Ser Ile Glu Ala
 260 265 270
 Met Asp Phe Val Asp Arg Leu Leu Val Lys Glu Arg Lys Ser Arg Met
 275 280 285
 Thr Ala Ser Glu Ala Leu Gln His Pro Trp Leu Lys Gln Lys Ile Glu
 290 295 300
 Arg Val Ser Thr Lys Val Ile Arg Thr Leu Lys His Arg Arg Tyr Tyr
 305 310 315 320
 His Thr Leu Ile Lys Lys Asp Leu Asn Met Val Val Ser Ala Ala Arg
 325 330 335
 Ile Ser Cys Gly Gly Ala Ile Arg Ser Gln Lys Gly Val
 340 345

 <210> 60
 <211> 358
 <212> PRT
 <213> Homo sapiens

 <400> 60
 Met Ser Gln Glu Arg Pro Thr Phe Tyr Arg Gln Glu Leu Asn Lys Thr
 1 5 10 15
 Ile Trp Glu Val Pro Glu Arg Tyr Gln Asn Leu Ser Pro Val Gly Ser
 20 25 30
 Gly Ala Tyr Gly Ser Val Cys Ala Ala Phe Asp Thr Lys Thr Gly Leu
 35 40 45
 Arg Val Ala Val Lys Lys Leu Ser Arg Pro Phe Gln Ser Ile Ile His
 50 55 60

Ala Lys Arg Thr Tyr Arg Glu Leu Arg Leu Leu Lys His Met Lys His
 65 70 75 80
 Glu Asn Val Ile Gly Leu Leu Asp Val Phe Thr Pro Ala Arg Ser Leu
 85 90 95
 Glu Glu Phe Asn Asp Val Tyr Leu Val Thr His Leu Met Gly Ala Asp
 100 105 110
 Leu Asn Asn Ile Val Lys Cys Gln Lys Leu Thr Asp Asp His Val Gln
 115 120 125
 Phe Leu Ile Tyr Gln Ile Leu Arg Gly Leu Lys Tyr Ile His Ser Ala
 130 135 140
 Asp Ile Ile His Arg Asp Leu Lys Pro Ser Asn Leu Ala Val Asn Glu
 145 150 155 160
 Asp Cys Glu Leu Lys Ile Leu Asp Phe Gly Leu Ala Arg His Thr Asp
 165 170 175
 Asp Glu Met Thr Gly Tyr Val Ala Thr Arg Trp Tyr Arg Ala Pro Glu
 180 185 190
 Ile Met Leu Asn Trp Met His Tyr Asn Gln Thr Val Asp Ile Trp Ser
 195 200 205
 Val Gly Cys Ile Met Ala Glu Leu Leu Thr Gly Arg Thr Leu Phe Pro
 210 215 220
 Gly Thr Asp His Ile Asp Gln Leu Lys Leu Ile Leu Arg Leu Val Gly
 225 230 235 240
 Thr Pro Gly Ala Glu Leu Leu Lys Lys Ile Ser Ser Glu Ser Ala Arg
 245 250 255
 Asn Tyr Ile Gln Ser Leu Thr Gln Met Pro Lys Met Asn Phe Ala Asn
 260 265 270
 Val Phe Ile Gly Ala Asn Pro Leu Ala Val Asp Leu Leu Glu Lys Met
 275 280 285
 Leu Val Leu Asp Ser Asp Lys Arg Ile Thr Ala Ala Gln Ala Leu Ala
 290 295 300
 His Ala Tyr Phe Ala Gln Tyr His Asp Pro Asp Asp Glu Pro Val Ala
 305 310 315 320
 Asp Pro Tyr Asp Gln Ser Phe Glu Ser Arg Asp Leu Leu Ile Asp Glu
 325 330 335
 Trp Lys Ser Leu Thr Tyr Asp Glu Val Ile Ser Phe Val Pro Pro Pro
 340 345 350
 Leu Asp Gln Glu Glu Met
 355

<210> 61
<211> 338
<212> PRT
<213> Homo sapiens

<400> 61
Met Thr Arg Asp Glu Ala Leu Pro Asp Ser His Ser Ala Gln Asp Phe
1 5 10 15
Tyr Glu Asn Tyr Glu Pro Lys Glu Ile Leu Gly Arg Gly Val Ser Ser
20 25 30
Val Val Arg Arg Cys Ile His Lys Pro Thr Ser Gln Glu Tyr Ala Val
35 40 45
Lys Val Ile Asp Val Thr Gly Gly Ser Phe Ser Pro Glu Glu Val
50 55 60
Arg Glu Leu Arg Glu Ala Thr Leu Lys Glu Val Asp Ile Leu Arg Lys
65 70 75 80
Val Ser Gly His Pro Asn Ile Ile Gln Leu Lys Asp Thr Tyr Glu Thr
85 90 95
Asn Thr Phe Phe Leu Val Phe Asp Leu Met Lys Arg Gly Glu Leu
100 105 110
Phe Asp Tyr Leu Thr Glu Lys Val Thr Leu Ser Glu Lys Glu Thr Arg
115 120 125
Lys Ile Met Arg Ala Leu Leu Glu Val Ile Cys Thr Leu His Lys Leu
130 135 140
Asn Ile Val His Arg Asp Leu Lys Pro Glu Asn Ile Leu Leu Asp Asp
145 150 155 160
Asn Met Asn Ile Lys Leu Thr Asp Phe Gly Phe Ser Cys Gln Leu Glu
165 170 175
Pro Gly Glu Arg Leu Arg Glu Val Cys Gly Thr Pro Ser Tyr Leu Ala
180 185 190
Pro Glu Ile Ile Glu Cys Ser Met Asn Glu Asp His Pro Gly Tyr Gly
195 200 205
Lys Glu Val Asp Met Trp Ser Thr Gly Val Ile Met Tyr Thr Leu Leu
210 215 220
Ala Gly Ser Pro Pro Phe Trp His Arg Lys Gln Met Leu Met Leu Arg
225 230 235 240
Met Ile Met Ser Gly Asn Tyr Gln Phe Gly Ser Pro Glu Trp Asp Asp
245 250 255
Tyr Ser Asp Thr Val Lys Asp Leu Val Ser Arg Phe Leu Val Val Gln
260 265 270

Pro Gln Asn Arg Tyr Thr Ala Glu Glu Ala Leu Ala His Pro Phe Phe
 275 280 285

Gln Gln Tyr Leu Val Glu Glu Val Arg His Phe Ser Pro Arg Gly Lys
 290 295 300

Phe Lys Val Ile Ala Leu Thr Val Leu Ala Ser Val Arg Ile Tyr Tyr
 305 310 315 320

Gln Tyr Arg Arg Val Lys Pro Val Thr Arg Glu Ile Val Ile Arg Asp
 325 330 335

Pro Tyr

<210> 62

<211> 374

<212> PRT

<213> Homo sapiens

<400> 62

Met Ser Gly Pro Val Pro Ser Arg Ala Arg Val Tyr Thr Asp Val Asn
 1 5 10 15

Thr His Arg Pro Arg Glu Tyr Trp Asp Tyr Glu Ser His Val Val Glu
 20 25 30

Trp Gly Asn Gln Asp Asp Tyr Gln Leu Val Arg Lys Leu Gly Arg Gly
 35 40 45

Lys Tyr Ser Glu Val Phe Glu Ala Ile Asn Ile Thr Asn Asn Glu Lys
 50 55 60

Val Val Val Lys Ile Leu Lys Pro Val Lys Lys Lys Ile Lys Arg
 65 70 75 80

Glu Ile Lys Ile Leu Glu Asn Leu Arg Gly Gly Pro Asn Ile Ile Thr
 85 90 95

Leu Ala Asp Ile Val Lys Asp Pro Val Ser Arg Thr Pro Ala Leu Val
 100 105 110

Phe Glu His Val Asn Asn Thr Asp Phe Lys Gln Leu Tyr Gln Thr Leu
 115 120 125

Thr Asp Tyr Asp Ile Arg Phe Tyr Met Tyr Glu Ile Leu Lys Ala Leu
 130 135 140

Asp Tyr Cys His Ser Met Gly Ile Met His Arg Asp Val Lys Pro His
 145 150 155 160

Asn Val Met Ile Asp His Glu His Arg Lys Leu Arg Leu Ile Asp Trp
 165 170 175

Gly Leu Ala Glu Phe Tyr His Pro Gly Gln Glu Tyr Asn Val Arg Val
 180 185 190

Ala Ser Arg Tyr Phe Lys Gly Pro Glu Leu Leu Val Asp Tyr Gln Met
 195 200 205
 Tyr Asp Tyr Ser Leu Asp Met Trp Ser Leu Gly Cys Met Leu Ala Ser
 210 215 220
 Met Ile Phe Arg Lys Glu Pro Phe His Gly His Asp Asn Tyr Asp
 225 230 235 240
 Gln Leu Val Arg Ile Ala Lys Val Leu Gly Thr Glu Asp Leu Tyr Asp
 245 250 255
 Tyr Ile Asp Lys Tyr Asn Ile Glu Leu Asp Pro Arg Phe Asn Asp Ile
 260 265 270
 Leu Gly Arg His Ser Arg Lys Arg Trp Glu Arg Phe Val His Ser Glu
 275 280 285
 Asn Gln His Leu Val Ser Pro Glu Ala Leu Asp Phe Leu Asp Lys Leu
 290 295 300
 Leu Arg Tyr Asp His Gln Ser Arg Leu Thr Ala Arg Glu Ala Met Glu
 305 310 315 320
 His Pro Tyr Phe Tyr Thr Val Val Lys Asp Gln Ala Arg Met Gly Ser
 325 330 335
 Ser Ser Met Pro Gly Gly Ser Thr Pro Val Ser Ser Ala Asn Met Met
 340 345 350
 Ser Gly Ile Ser Ser Val Pro Thr Pro Ser Pro Leu Gly Pro Leu Ala
 355 360 365
 Gly Ser Pro Val Ile Ala
 370

<210> 63
 <211> 303
 <212> PRT
 <213> Homo sapiens

<400> 63
 Met Glu Ala Pro Gly Leu Ala Gln Ala Ala Ala Ala Glu Ser Asp Ser
 1 5 10 15
 Arg Lys Val Ala Glu Glu Thr Pro Asp Gly Ala Pro Ala Leu Cys Pro
 20 25 30
 Ser Pro Glu Ala Leu Ser Pro Glu Pro Pro Val Tyr Ser Leu Gln Asp
 35 40 45
 Phe Asp Thr Leu Ala Thr Val Gly Thr Gly Thr Phe Gly Arg Val His
 50 55 60
 Leu Val Lys Glu Lys Thr Ala Lys His Phe Phe Ala Leu Lys Val Met
 65 70 75 80

Ser Ile Pro Asp Val Ile Arg Leu Lys Gln Glu Gln His Val His Asn
 85 90 95
 Glu Lys Ser Val Leu Lys Glu Val Ser His Pro Phe Leu Ile Arg Leu
 100 105 110
 Phe Trp Thr Trp His Asp Glu Arg Phe Leu Tyr Met Leu Met Glu Tyr
 115 120 125
 Val Pro Gly Gly Glu Leu Phe Ser Tyr Leu Arg Asn Arg Gly Arg Phe
 130 135 140
 Ser Ser Thr Thr Gly Leu Phe Tyr Ser Ala Glu Ile Ile Cys Ala Ile
 145 150 155 160
 Glu Tyr Leu His Ser Lys Glu Ile Val Tyr Arg Asp Leu Lys Pro Glu
 165 170 175
 Asn Ile Leu Leu Asp Arg Asp Gly His Ile Lys Leu Thr Asp Phe Gly
 180 185 190
 Phe Ala Lys Lys Leu Val Asp Arg Thr Trp Thr Leu Cys Gly Thr Pro
 195 200 205
 Glu Tyr Leu Ala Pro Glu Val Ile Gln Ser Lys Gly His Gly Arg Ala
 210 215 220
 Val Asp Trp Trp Ala Leu Gly Ile Leu Ile Phe Glu Met Leu Ser Gly
 225 230 235 240
 Phe Pro Pro Phe Phe Asp Asp Asn Pro Phe Gly Ile Tyr Gln Lys Ile
 245 250 255
 Leu Ala Gly Lys Ile Asp Phe Pro Arg His Leu Asp Phe His Val Lys
 260 265 270
 Asp Leu Ile Lys Lys Leu Leu Val Val Asp Arg Thr Arg Arg Leu Gly
 275 280 285
 Asn Met Lys Asn Gly Ala Asn Asp Val Lys His His Arg Trp Phe
 290 295 300

<210> 64
 <211> 460
 <212> PRT
 <213> Homo sapiens

<400> 64
 Ile Val Leu Val Val Ile Trp Lys Gln Lys Pro Arg Tyr Glu Ile Arg
 1 5 10 15
 Trp Arg Val Ile Glu Ser Ile Ser Pro Asp Gly His Glu Tyr Ile Tyr
 20 25 30
 Val Asp Pro Met Gln Leu Pro Tyr Asp Ser Arg Trp Glu Phe Pro Arg
 35 40 45

Asp Gly Leu Val Leu Gly Arg Val Leu Gly Ser Gly Ala Phe Gly Lys
 50 55 60

Val Val Glu Gly Thr Ala Tyr Gly Leu Ser Arg Ser Gln Pro Val Met
 65 70 75 80

Lys Val Ala Val Lys Met Leu Lys Pro Thr Ala Arg Ser Ser Glu Lys
 85 90 95

Gln Ala Leu Met Ser Glu Leu Lys Ile Met Thr His Leu Gly Pro His
 100 105 110

Leu Asn Ile Val Asn Leu Leu Gly Ala Cys Thr Lys Ser Gly Pro Ile
 115 120 125

Tyr Ile Ile Thr Glu Tyr Cys Phe Tyr Gly Asp Leu Val Asn Tyr Leu
 130 135 140

His Lys Asn Arg Asp Ser Phe Leu Ser His His Pro Glu Lys Pro Lys
 145 150 155 160

Lys Glu Leu Asp Ile Phe Gly Leu Asn Pro Ala Asp Glu Ser Thr Arg
 165 170 175

Ser Tyr Val Ile Leu Ser Phe Glu Asn Asn Gly Asp Tyr Met Asp Met
 180 185 190

Lys Gln Ala Asp Thr Thr Gln Tyr Val Pro Met Leu Glu Arg Lys Glu
 195 200 205

Val Ser Lys Tyr Ser Asp Ile Gln Arg Ser Leu Tyr Asp Arg Pro Ala
 210 215 220

Ser Tyr Lys Lys Ser Met Leu Asp Ser Glu Val Lys Asn Leu Leu
 225 230 235 240

Ser Asp Asp Asn Ser Glu Gly Leu Thr Leu Asp Leu Leu Ser Phe
 245 250 255

Thr Tyr Gln Val Ala Arg Gly Met Glu Phe Leu Ala Ser Lys Asn Cys
 260 265 270

Val His Arg Asp Leu Ala Ala Arg Asn Val Leu Leu Ala Gln Gly Lys
 275 280 285

Ile Val Lys Ile Cys Asp Phe Gly Leu Ala Arg Asp Ile Met His Asp
 290 295 300

Ser Asn Tyr Val Ser Lys Gly Ser Thr Phe Leu Pro Val Lys Trp Met
 305 310 315 320

Ala Pro Glu Ser Ile Phe Asp Asn Leu Tyr Thr Thr Leu Ser Asp Val
 325 330 335

Trp Ser Tyr Gly Ile Leu Leu Trp Glu Ile Phe Ser Leu Gly Gly Thr
 340 345 350

Pro Tyr Pro Gly Met Met Val Asp Ser Thr Phe Tyr Asn Lys Ile Lys
 355 360 365
 Ser Gly Tyr Arg Met Ala Lys Pro Asp His Ala Thr Ser Glu Val Tyr
 370 375 380
 Glu Ile Met Val Lys Cys Trp Asn Ser Glu Pro Glu Lys Arg Pro Ser
 385 390 395 400
 Phe Tyr His Leu Ser Glu Ile Val Glu Asn Leu Leu Pro Gly Gln Tyr
 405 410 415
 Lys Lys Ser Tyr Glu Lys Ile His Leu Asp Phe Leu Lys Ser Asp His
 420 425 430
 Pro Ala Val Ala Arg Met Arg Val Asp Ser Asp Asn Ala Tyr Ile Gly
 435 440 445
 Val Thr Tyr Lys Asn Glu Glu Asp Lys Leu Lys Asp
 450 455 460

 <210> 65
 <211> 289
 <212> PRT
 <213> Homo sapiens

 <400> 65
 Val Ser Asn Lys Ala Tyr Glu Asp Ala Glu Ala Lys Ala Lys Tyr Glu
 1 5 10 15
 Ala Glu Ala Ala Phe Phe Ala Asn Leu Lys Leu Ser Asp Phe Asn Ile
 20 25 30
 Ile Asp Thr Leu Gly Val Gly Phe Gly Arg Val Glu Leu Val Gln
 35 40 45
 Leu Lys Ser Glu Glu Ser Lys Thr Phe Ala Met Lys Ile Leu Lys Lys
 50 55 60
 Arg His Ile Val Asp Thr Arg Gln Gln Glu His Ile Arg Ser Glu Lys
 65 70 75 80
 Gln Ile Met Gln Gly Ala His Ser Asp Phe Ile Val Arg Leu Tyr Arg
 85 90 95
 Thr Phe Lys Asp Ser Lys Tyr Leu Tyr Met Leu Met Glu Ala Cys Leu
 100 105 110
 Gly Gly Glu Leu Trp Thr Ile Leu Arg Asp Arg Gly Ser Phe Glu Asp
 115 120 125
 Ser Thr Thr Arg Phe Tyr Thr Ala Cys Val Val Glu Ala Phe Ala Tyr
 130 135 140
 Leu His Ser Lys Gly Ile Ile Tyr Arg Asp Leu Lys Pro Glu Asn Leu
 145 150 155 160

Ile Leu Asp His Arg Gly Tyr Ala Lys Leu Val Asp Phe Gly Phe Ala
 165 170 175

Lys Lys Ile Gly Phe Gly Lys Thr Trp Thr Phe Cys Gly Thr Pro
 180 185 190

Glu Tyr Val Ala Pro Glu Ile Ile Leu Asn Lys Gly His Asp Ile Ser
 195 200 205

Ala Asp Tyr Trp Ser Leu Gly Ile Leu Met Tyr Glu Leu Leu Thr Gly
 210 215 220

Ser Pro Pro Phe Ser Gly Pro Asp Pro Met Lys Thr Tyr Asn Ile Ile
 225 230 235 240

Leu Arg Gly Ile Asp Met Ile Glu Phe Pro Lys Lys Ile Ala Lys Asn
 245 250 255

Ala Ala Asn Leu Ile Lys Lys Leu Cys Arg Asp Asn Pro Ser Glu Arg
 260 265 270

Leu Gly Asn Leu Lys Asn Gly Val Lys Asp Ile Gln Lys His Lys Trp
 275 280 285

Phe

<210> 66
<211> 297
<212> PRT
<213> Homo sapiens

<400> 66
Gln His Asn Ser Ala Gly Leu Ile Ser Arg Leu Lys Tyr Pro Val Ser
 1 5 10 15

Gln Gln Asn Lys Asn Ala Pro Ser Thr Ala Gly Leu Gly Tyr Gly Ser
 20 25 30

Trp Glu Ile Asp Pro Lys Asp Leu Thr Phe Leu Lys Glu Leu Gly Thr
 35 40 45

Gly Gln Phe Gly Val Val Lys Tyr Gly Lys Trp Arg Gly Gln Tyr Asp
 50 55 60

Val Ala Ile Lys Met Ile Lys Glu Gly Ser Met Ser Glu Asp Glu Phe
 65 70 75 80

Ile Glu Glu Ala Lys Val Met Met Asn Leu Ser His Glu Lys Leu Val
 85 90 95

Gln Leu Tyr Gly Val Cys Thr Lys Gln Arg Pro Ile Phe Ile Ile Thr
 100 105 110

Glu Tyr Met Ala Asn Gly Cys Leu Leu Asn Tyr Leu Arg Glu Met Arg
 115 120 125

His Arg Phe Gln Thr Gln Gln Leu Leu Glu Met Cys Lys Asp Val Cys
 130 135 140

Glu Ala Met Glu Tyr Leu Glu Ser Lys Gln Phe Leu His Arg Asp Leu
 145 150 155 160

Ala Ala Arg Asn Cys Leu Val Asn Asp Gln Gly Val Val Lys Val Ser
 165 170 175

Asp Phe Gly Leu Ser Arg Tyr Val Leu Asp Asp Glu Tyr Thr Ser Ser
 180 185 190

Val Gly Ser Lys Phe Pro Val Arg Trp Ser Pro Pro Glu Val Leu Met
 195 200 205

Tyr Ser Lys Phe Ser Ser Lys Ser Asp Ile Trp Ala Phe Gly Val Leu
 210 215 220

Met Trp Glu Ile Tyr Ser Leu Gly Lys Met Pro Tyr Glu Arg Phe Thr
 225 230 235 240

Asn Ser Glu Thr Ala Glu His Ile Ala Gln Gly Leu Arg Leu Tyr Arg
 245 250 255

Pro His Leu Ala Ser Glu Lys Val Tyr Thr Ile Met Tyr Ser Cys Trp
 260 265 270

His Glu Lys Ala Asp Glu Arg Pro Thr Phe Lys Ile Leu Leu Ser Asn
 275 280 285

Ile Leu Asp Val Met Asp Glu Glu Ser
 290 295

<210> 67
 <211> 384
 <212> PRT
 <213> Homo sapiens

<400> 67
 Met Thr Phe Arg Arg Pro Ala Gln Ala Phe Pro Val Ser Tyr Ser Ser
 1 5 10 15

Ser Gly Ala Arg Arg Pro Ser Leu Asp Ser Met Glu Asn Gln Val Ser
 20 25 30

Val Asp Ala Phe Lys Ile Leu Glu Asp Pro Lys Trp Glu Phe Pro Arg
 35 40 45

Lys Asn Leu Val Leu Gly Lys Thr Leu Gly Glu Gly Glu Phe Gly Lys
 50 55 60

Val Val Lys Ala Thr Ala Phe His Leu Lys Gly Arg Ala Gly Tyr Thr
 65 70 75 80

Thr Val Ala Val Lys Met Leu Lys Glu Asn Ala Ser Pro Ser Glu Leu
 85 90 95

Arg Asp Leu Leu Ser Glu Phe Asn Val Leu Lys Gln Val Asn His Pro
 100 105 110

His Val Ile Lys Leu Tyr Gly Ala Cys Ser Gln Asp Gly Pro Leu Leu
 115 120 125

Leu Ile Val Glu Tyr Ala Lys Tyr Gly Ser Leu Arg Gly Phe Leu Arg
 130 135 140

Glu Ser Arg Lys Val Gly Pro Gly Tyr Leu Gly Ser Gly Gly Ser Arg
 145 150 155 160

Asn Ser Ser Ser Leu Asp His Pro Asp Glu Arg Ala Leu Thr Met Gly
 165 170 175

Asp Leu Ile Ser Phe Ala Trp Gln Ile Ser Gln Gly Met Gln Tyr Leu
 180 185 190

Ala Glu Met Lys Leu Val His Arg Asp Leu Ala Ala Arg Asn Ile Leu
 195 200 205

Val Ala Glu Gly Arg Lys Met Lys Ile Ser Asp Phe Gly Leu Ser Arg
 210 215 220

Asp Val Tyr Glu Glu Asp Ser Tyr Val Lys Arg Ser Gln Gly Arg Ile
 225 230 235 240

Pro Val Lys Trp Met Ala Ile Glu Ser Leu Phe Asp His Ile Tyr Thr
 245 250 255

Thr Gln Ser Asp Val Trp Ser Phe Gly Val Leu Leu Trp Glu Ile Val
 260 265 270

Thr Leu Gly Gly Asn Pro Tyr Pro Gly Ile Pro Pro Glu Arg Leu Phe
 275 280 285

Asn Leu Leu Lys Thr Gly His Arg Met Glu Arg Pro Asp Asn Cys Ser
 290 295 300

Glu Glu Met Tyr Arg Leu Met Leu Gln Cys Trp Lys Gln Glu Pro Asp
 305 310 315 320

Lys Arg Pro Val Phe Ala Asp Ile Ser Lys Asp Leu Glu Lys Met Met
 325 330 335

Val Lys Arg Arg Asp Tyr Leu Asp Leu Ala Ala Ser Thr Pro Ser Asp
 340 345 350

Ser Leu Ile Tyr Asp Asp Gly Leu Ser Glu Glu Thr Pro Leu Val
 355 360 365

Asp Cys Asn Asn Ala Pro Leu Pro Arg Ala Leu Pro Ser Thr Trp Ile
 370 375 380

<210> 68

<211> 373

<212> PRT

<213> Homo sapiens

<400> 68

Gly	Val	Thr	Val	Leu	Ile	Asn	Glu	Asp	Lys	Glu	Leu	Ala	Glu	Leu	Arg
1				5					10				15		

Gly	Leu	Ala	Ala	Gly	Val	Gly	Leu	Ala	Asn	Ala	Cys	Tyr	Ala	Ile	His
				20			25					30			

Thr	Leu	Pro	Thr	Gln	Glu	Glu	Ile	Glu	Asn	Leu	Pro	Ala	Phe	Pro	Arg
					35		40				45				

Glu	Lys	Leu	Thr	Leu	Arg	Leu	Leu	Gly	Ser	Gly	Ala	Phe	Gly	Glu
					50		55			60				

Val	Tyr	Glu	Gly	Thr	Ala	Val	Asp	Ile	Leu	Gly	Val	Gly	Ser	Gly	Glu
					65		70		75		80				

Ile	Lys	Val	Ala	Val	Lys	Thr	Leu	Lys	Lys	Gly	Ser	Thr	Asp	Gln	Glu
					85			90		95					

Lys	Ile	Glu	Phe	Leu	Lys	Glu	Ala	His	Leu	Met	Ser	Lys	Phe	Asn	His
					100			105		110					

Pro	Asn	Ile	Leu	Lys	Gln	Leu	Gly	Val	Cys	Leu	Leu	Asn	Glu	Pro	Gln
					115			120		125					

Tyr	Ile	Ile	Leu	Glu	Leu	Met	Glu	Gly	Gly	Asp	Leu	Leu	Thr	Tyr	Leu
					130		135			140					

Arg	Lys	Ala	Arg	Met	Ala	Thr	Phe	Tyr	Gly	Pro	Leu	Leu	Thr	Leu	Val
					145		150		155		160				

Asp	Leu	Val	Asp	Leu	Cys	Val	Asp	Ile	Ser	Lys	Gly	Cys	Val	Tyr	Leu
					165				170		175				

Glu	Arg	Met	His	Phe	Ile	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Cys	Leu
					180		185			190					

Val	Ser	Val	Lys	Asp	Tyr	Thr	Ser	Pro	Arg	Ile	Val	Lys	Ile	Gly	Asp
					195		200		205						

Phe	Gly	Leu	Ala	Arg	Asp	Ile	Tyr	Lys	Asn	Asp	Tyr	Tyr	Arg	Lys	Arg
					210		215			220					

Gly	Glu	Gly	Leu	Leu	Pro	Val	Arg	Trp	Met	Ala	Pro	Glu	Ser	Leu	Met
					225		230		235		240				

Asp	Gly	Ile	Phe	Thr	Thr	Gln	Ser	Asp	Val	Trp	Ser	Phe	Gly	Ile	Leu
					245			250		255					

Ile	Trp	Glu	Ile	Leu	Thr	Leu	Gly	His	Gln	Pro	Tyr	Pro	Ala	His	Ser
					260			265		270					

Asn Leu Asp Val Leu Asn Tyr Val Gln Thr Gly Gly Arg Leu Glu Pro
 275 280 285
 Pro Arg Asn Cys Pro Asp Asp Leu Trp Asn Leu Met Thr Gln Cys Trp
 290 295 300
 Ala Gln Glu Pro Asp Gln Arg Pro Thr Phe His Arg Ile Gln Asp Gln
 305 310 315 320
 Leu Gln Leu Phe Arg Asn Phe Phe Leu Asn Ser Ile Tyr Lys Ser Arg
 325 330 335
 Asp Glu Ala Asn Asn Ser Gly Val Ile Asn Glu Ser Phe Glu Gly Glu
 340 345 350
 Asp Gly Asp Val Ile Cys Leu Asn Ser Asp Asp Ile Met Pro Val Val
 355 360 365
 Leu Met Glu Thr Lys
 370

<210> 69
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 69
 Leu Ser Thr Gln Gln Pro Leu Thr Lys Ser Gly Val Val Leu His
 1 5 10 15
 Arg Ala Val Pro Lys Asp Lys Trp Val Leu Asn His Glu Asp Leu Val
 20 25 30
 Leu Gly Glu Gln Ile Gly Arg Gly Asn Phe Gly Glu Val Phe Ser Gly
 35 40 45
 Arg Leu Arg Ala Asp Asn Thr Leu Val Ala Val Lys Ser Cys Arg Glu
 50 55 60
 Thr Leu Pro Pro Asp Leu Lys Ala Lys Phe Leu Gln Glu Ala Arg Ile
 65 70 75 80
 Leu Lys Gln Tyr Ser His Pro Asn Ile Val Arg Leu Ile Gly Val Cys
 85 90 95
 Thr Gln Lys Gln Pro Ile Tyr Ile Val Met Glu Leu Val Gln Gly Gly
 100 105 110
 Asp Phe Leu Thr Phe Leu Arg Thr Glu Gly Ala Arg Leu Arg Val Lys
 115 120 125
 Thr Leu Leu Gln Met Val Gly Asp Ala Ala Ala Gly Met Glu Tyr Leu
 130 135 140
 Glu Ser Lys Cys Cys Ile His Arg Asp Leu Ala Ala Arg Asn Cys Leu
 145 150 155 160

```

<210> 70
<211> 370
<212> PRT
<213> Homo sapiens

<400> 70
Leu Gln Ala Met Gln Met Glu Leu Gln Ser Pro Glu Tyr Lys Leu Ser
    1           5           10          15
Lys Leu Arg Thr Ser Thr Ile Met Thr Asp Tyr Asn Pro Asn Tyr Cys
    20          25          30
Phe Ala Gly Lys Thr Ser Ser Ile Ser Asp Leu Lys Glu Val Pro Arg
    35          40          45
Lys Asn Ile Thr Leu Ile Arg Gly Leu Gly His Gly Ala Phe Gly Glu
    50          55          60
Val Tyr Glu Gly Gln Val Ser Gly Met Pro Asn Asp Pro Ser Pro Leu
    65          70          75          80
Gln Val Ala Val Lys Thr Leu Pro Glu Val Cys Ser Glu Gln Asp Glu
    85          90          95
Leu Asp Phe Leu Met Glu Ala Leu Ile Ile Ser Lys Phe Asn His Gln
    100         105         110
Asn Ile Val Arg Cys Ile Gly Val Ser Leu Gln Ser Leu Pro Arg Phe
    115         120         125

```

Ile Leu Leu Glu Leu Met Ala Gly Gly Asp Leu Lys Ser Phe Leu Arg
 130 135 140
 Glu Thr Arg Pro Arg Pro Ser Gln Pro Ser Ser Leu Ala Met Leu Asp
 145 150 155 160
 Leu Leu His Val Ala Arg Asp Ile Ala Cys Gly Cys Gln Tyr Leu Glu
 165 170 175
 Glu Asn His Phe Ile His Arg Asp Ile Ala Ala Arg Asn Cys Leu Leu
 180 185 190
 Thr Cys Pro Gly Pro Gly Arg Val Ala Lys Ile Gly Asp Phe Gly Met
 195 200 205
 Ala Arg Asp Ile Tyr Arg Ala Ser Tyr Tyr Arg Lys Gly Gly Cys Ala
 210 215 220
 Met Leu Pro Val Lys Trp Met Pro Pro Glu Ala Phe Met Glu Gly Ile
 225 230 235 240
 Phe Thr Ser Lys Thr Asp Thr Trp Ser Phe Gly Val Leu Leu Trp Glu
 245 250 255
 Ile Phe Ser Leu Gly Tyr Met Pro Tyr Pro Ser Lys Ser Asn Gln Glu
 260 265 270
 Val Leu Glu Phe Val Thr Ser Gly Gly Arg Met Asp Pro Pro Lys Asn
 275 280 285
 Cys Pro Gly Pro Val Tyr Arg Ile Met Thr Gln Cys Trp Gln His Gln
 290 295 300
 Pro Glu Asp Arg Pro Asn Phe Ala Ile Ile Leu Glu Arg Ile Glu Tyr
 305 310 315 320
 Cys Thr Gln Asp Pro Asp Val Ile Asn Thr Ala Leu Pro Ile Glu Tyr
 325 330 335
 Gly Pro Leu Val Glu Glu Glu Lys Val Pro Val Arg Pro Lys Asp
 340 345 350
 Pro Glu Gly Val Pro Pro Leu Leu Val Ser Gln Gln Ala Lys Arg Glu
 355 360 365
 Glu Glu
 370
 <210> 71
 <211> 345
 <212> PRT
 <213> Homo sapiens
 <400> 71
 Met Ala Leu Asp Val Lys Ser Arg Ala Lys Arg Tyr Glu Lys Leu Asp
 1 5 10 15

Phe Leu Gly Glu Gly Gln Phe Ala Thr Val Tyr Lys Ala Arg Asp Lys
 20 25 30

Asn Thr Asn Gln Ile Val Ala Ile Lys Lys Ile Lys Leu Gly His Arg
 35 40 45

Ser Glu Ala Lys Asp Gly Ile Asn Arg Thr Ala Leu Arg Glu Ile Lys
 50 55 60

Leu Leu Gln Glu Leu Ser His Pro Asn Ile Ile Gly Leu Leu Asp Ala
 65 70 75 80

Phe Gly His Lys Ser Asn Ile Ser Leu Val Phe Asp Phe Met Glu Thr
 85 90 95

Asp Leu Glu Val Ile Ile Lys Asp Asn Ser Leu Val Leu Thr Pro Ser
 100 105 110

His Ile Lys Ala Tyr Met Leu Met Thr Leu Gln Gly Leu Glu Tyr Leu
 115 120 125

His Gln His Trp Ile Leu His Arg Asp Leu Lys Pro Asn Asn Leu Leu
 130 135 140

Leu Asp Glu Asn Gly Val Leu Lys Leu Ala Asp Phe Gly Leu Ala Lys
 145 150 155 160

Ser Phe Gly Ser Pro Asn Arg Ala Tyr Thr His Gln Val Val Thr Arg
 165 170 175

Trp Tyr Arg Ala Pro Glu Leu Leu Phe Gly Ala Arg Met Tyr Gly Val
 180 185 190

Gly Val Asp Met Trp Ala Val Gly Cys Ile Leu Ala Glu Leu Leu Leu
 195 200 205

Arg Val Pro Phe Leu Pro Gly Asp Ser Asp Leu Asp Gln Leu Thr Arg
 210 215 220

Ile Phe Glu Thr Leu Gly Thr Pro Thr Glu Glu Gln Trp Pro Asp Met
 225 230 235 240

Cys Ser Leu Pro Asp Tyr Val Thr Phe Lys Ser Phe Pro Gly Ile Pro
 245 250 255

Leu His His Ile Phe Ser Ala Ala Gly Asp Asp Leu Leu Asp Leu Ile
 260 265 270

Gln Gly Leu Phe Leu Phe Asn Pro Cys Ala Arg Ile Thr Ala Thr Gln
 275 280 285

Ala Leu Lys Met Lys Tyr Phe Ser Asn Arg Pro Gly Pro Thr Pro Gly
 290 295 300

Cys Gln Leu Pro Arg Pro Asn Cys Pro Val Glu Thr Leu Lys Glu Gln
 305 310 315 320

Ser Asn Pro Ala Leu Ala Ile Lys Arg Lys Arg Thr Glu Ala Leu Glu
 325 330 335
 Gln Gly Gly Leu Pro Lys Lys Leu Ile
 340 345

<210> 72
 <211> 360
 <212> PRT
 <213> Homo sapiens

<400> 72
 Met Ala Glu Pro Asp Leu Glu Cys Glu Gln Ile Arg Leu Lys Cys Ile
 1 5 10 15

Arg Lys Glu Gly Phe Phe Thr Val Pro Pro Glu His Arg Leu Gly Arg
 20 25 30

Cys Arg Ser Val Lys Glu Phe Glu Lys Leu Asn Arg Ile Gly Glu Gly
 35 40 45

Thr Tyr Gly Ile Val Tyr Arg Ala Arg Asp Thr Gln Thr Asp Glu Ile
 50 55 60

Val Ala Leu Lys Lys Val Arg Met Asp Lys Glu Lys Asp Gly Ile Pro
 65 70 75 80

Ile Ser Ser Leu Arg Glu Ile Thr Leu Leu Arg Leu Arg His Pro
 85 90 95

Asn Ile Val Glu Leu Lys Glu Val Val Val Gly Asn His Leu Glu Ser
 100 105 110

Ile Phe Leu Val Met Gly Tyr Cys Glu Gln Asp Leu Ala Ser Leu Leu
 115 120 125

Glu Asn Met Pro Thr Pro Phe Ser Glu Ala Gln Val Lys Cys Ile Val
 130 135 140

Leu Gln Val Leu Arg Gly Leu Gln Tyr Leu His Arg Asn Phe Ile Ile
 145 150 155 160

His Arg Asp Leu Lys Val Ser Asn Leu Leu Met Thr Asp Lys Gly Cys
 165 170 175

Val Lys Thr Ala Asp Phe Gly Leu Ala Arg Ala Tyr Gly Val Pro Val
 180 185 190

Lys Pro Met Thr Pro Lys Val Val Thr Leu Trp Tyr Arg Ala Pro Glu
 195 200 205

Leu Leu Leu Gly Thr Thr Gln Thr Thr Ser Ile Asp Met Trp Ala
 210 215 220

Val Gly Cys Ile Leu Ala Glu Leu Leu Ala His Arg Pro Leu Leu Pro
 225 230 235 240

Gly Thr Ser Glu Ile His Gln Ile Asp Leu Ile Val Gln Leu Leu Gly
 245 250 255

Thr Pro Ser Glu Asn Ile Trp Pro Gly Phe Ser Lys Leu Pro Leu Val
 260 265 270

Gly Gln Tyr Ser Leu Arg Lys Gln Pro Tyr Asn Asn Leu Lys His Lys
 275 280 285

Phe Pro Trp Leu Ser Glu Ala Gly Leu Arg Leu Leu His Phe Leu Phe
 290 295 300

Met Tyr Asp Pro Lys Lys Arg Ala Thr Ala Gly Asp Cys Leu Glu Ser
 305 310 315 320

Ser Tyr Phe Lys Glu Lys Pro Leu Pro Cys Glu Pro Glu Leu Met Pro
 325 330 335

Thr Phe Pro His His Arg Asn Lys Arg Ala Ala Pro Ala Thr Ser Glu
 340 345 350

Gly Gln Ser Lys Arg Cys Lys Pro
 355 360

<210> 73
<211> 296
<212> PRT
<213> *Homo sapiens*

<400> 73
 Arg Ala Gln Ser Leu Ser His Gly Leu Arg Leu Ala Ala Pro Cys Arg
 1 5 10 15
 Lys His Glu Pro Glu Pro Leu Pro His Trp Asp Asp Trp Glu Arg Pro
 20 25 30
 Arg Glu Glu Phe Thr Leu Cys Arg Lys Leu Gly Ser Gly Tyr Phe Gly
 35 40 45
 Glu Val Phe Glu Gly Leu Trp Lys Asp Arg Val Gln Val Ala Ile Lys
 50 55 60
 Val Ile Ser Arg Asp Asn Leu Leu His Gln Gln Met Leu Gln Ser Glu
 65 70 75 80
 Ile Gln Ala Met Lys Lys Leu Arg His Lys His Ile Leu Ala Leu Tyr
 85 90 95
 Ala Val Val Ser Val Gly Asp Pro Val Tyr Ile Ile Thr Glu Leu Met
 100 105 110
 Ala Lys Gly Ser Leu Leu Glu Leu Leu Arg Asp Ser Asp Glu Lys Val
 115 120 125
 Leu Pro Val Ser Glu Leu Leu Asp Ile Ala Trp Gln Val Ala Glu Gly
 130 135 140

Met Cys Tyr Leu Glu Ser Gln Asn Tyr Ile His Arg Asp Leu Ala Ala
 145 150 155 160

Arg Asn Ile Leu Val Gly Glu Asn Thr Leu Cys Lys Val Gly Asp Phe
 165 170 175

Gly Leu Ala Arg Leu Ile Lys Glu Asp Val Tyr Leu Ser His Asp His
 180 185 190

Asn Ile Pro Tyr Lys Trp Thr Ala Pro Glu Ala Leu Ser Arg Gly His
 195 200 205

Tyr Ser Thr Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu His Glu
 210 215 220

Met Phe Ser Arg Gly Gln Val Pro Tyr Pro Gly Met Ser Asn His Glu
 225 230 235 240

Ala Phe Leu Arg Val Asp Ala Gly Tyr Arg Met Pro Cys Pro Leu Glu
 245 250 255

Cys Pro Pro Ser Val His Lys Leu Met Leu Thr Cys Trp Cys Arg Asp
 260 265 270

Pro Glu Gln Arg Pro Cys Phe Lys Ala Leu Arg Glu Arg Leu Ser Ser
 275 280 285

Phe Thr Ser Tyr Glu Asn Pro Thr
 290 295

<210> 74
 <211> 321
 <212> PRT
 <213> Homo sapiens

<400> 74
 Met Ala Thr Ile Thr Cys Thr Arg Phe Thr Glu Glu Tyr Gln Leu Phe
 1 5 10 15

Glu Glu Leu Gly Lys Gly Ala Phe Ser Val Val Arg Arg Cys Val Lys
 20 25 30

Val Leu Ala Gly Gln Glu Tyr Ala Ala Lys Ile Ile Asn Thr Lys Lys
 35 40 45

Leu Ser Ala Arg Asp His Gln Lys Leu Glu Arg Glu Ala Arg Ile Cys
 50 55 60

Arg Leu Leu Lys His Pro Asn Ile Val Arg Leu His Asp Ser Ile Ser
 65 70 75 80

Glu Glu Gly His His Tyr Leu Ile Phe Asp Leu Val Thr Gly Gly Glu
 85 90 95

Leu Phe Glu Asp Ile Val Ala Arg Glu Tyr Tyr Ser Glu Ala Asp Ala
 100 105 110

Ser His Cys Ile Gln Gln Ile Leu Glu Ala Val Leu His Cys His Gln
 115 120 125

 Met Gly Val Val His Arg Asp Leu Lys Pro Glu Asn Leu Leu Leu Ala
 130 135 140

 Ser Lys Leu Lys Gly Ala Ala Val Lys Leu Ala Asp Phe Gly Leu Ala
 145 150 155 160

 Ile Glu Val Glu Gly Glu Gln Gln Ala Trp Phe Gly Phe Ala Gly Thr
 165 170 175

 Pro Gly Tyr Leu Ser Pro Glu Val Leu Arg Lys Asp Pro Tyr Gly Lys
 180 185 190

 Pro Val Asp Leu Trp Ala Cys Gly Val Ile Leu Tyr Ile Leu Leu Val
 195 200 205

 Gly Tyr Pro Pro Phe Trp Asp Glu Asp Gln His Arg Leu Tyr Gln Gln
 210 215 220

 Ile Lys Ala Gly Ala Tyr Asp Phe Pro Ser Pro Glu Trp Asp Thr Val
 225 230 235 240

 Thr Pro Glu Ala Lys Asp Leu Ile Asn Lys Met Leu Thr Ile Asn Pro
 245 250 255

 Ser Lys Arg Ile Thr Ala Ala Glu Ala Leu Lys His Pro Trp Ile Ser
 260 265 270

 His Arg Ser Thr Val Ala Ser Cys Met His Arg Gln Glu Thr Val Asp
 275 280 285

 Cys Leu Lys Lys Phe Asn Ala Arg Arg Lys Leu Lys Gly Ala Ile Leu
 290 295 300

 Thr Thr Met Leu Ala Thr Arg Asn Phe Ser Gly Gly Lys Ser Gly Gly
 305 310 315 320

 Asn

<210> 75
<211> 365
<212> PRT
<213> Homo sapiens

<400> 75
Met Ala Lys Gln Tyr Asp Ser Val Glu Cys Pro Phe Cys Asp Glu Val
 1 5 10 15

Ser Lys Tyr Glu Lys Leu Ala Lys Ile Gly Gln Gly Thr Phe Gly Glu
 20 25 30

Val Phe Lys Ala Arg His Arg Lys Thr Gly Gln Lys Val Ala Leu Lys
 35 40 45

Lys Val Leu Met Glu Asn Glu Lys Glu Gly Phe Pro Ile Thr Ala Leu
 50 55 60

Arg Glu Ile Lys Ile Leu Gln Leu Leu Lys His Glu Asn Val Val Asn
 65 70 75 80

Leu Ile Glu Ile Cys Arg Thr Lys Ala Ser Pro Tyr Asn Arg Cys Lys
 85 90 95

Gly Ser Ile Tyr Leu Val Phe Asp Phe Cys Glu His Asp Leu Ala Gly
 100 105 110

Leu Leu Ser Asn Val Leu Val Lys Phe Thr Leu Ser Glu Ile Lys Arg
 115 120 125

Val Met Gln Met Leu Leu Asn Gly Leu Tyr Tyr Ile His Arg Asn Lys
 130 135 140

Ile Leu His Arg Asp Met Lys Ala Ala Asn Val Leu Ile Thr Arg Asp
 145 150 155 160

Gly Val Leu Lys Leu Ala Asp Phe Gly Leu Ala Arg Ala Phe Ser Leu
 165 170 175

Ala Lys Asn Ser Gln Pro Asn Arg Tyr Thr Asn Arg Val Val Thr Leu
 180 185 190

Trp Tyr Arg Pro Pro Glu Leu Leu Leu Gly Glu Arg Asp Tyr Gly Pro
 195 200 205

Pro Ile Asp Leu Trp Gly Ala Gly Cys Ile Met Ala Glu Met Trp Thr
 210 215 220

Arg Ser Pro Ile Met Gln Ala Asn Thr Glu Gln His Gln Leu Ala Leu
 225 230 235 240

Ile Ser Gln Leu Cys Gly Ser Ile Thr Pro Glu Val Trp Pro Asn Val
 245 250 255

Asp Asn Tyr Glu Leu Tyr Glu Lys Leu Glu Leu Val Lys Gly Gln Lys
 260 265 270

Arg Lys Val Lys Asp Arg Leu Lys Ala Tyr Val Arg Asp Pro Tyr Ala
 275 280 285

Leu Asp Leu Ile Asp Lys Leu Leu Val Leu Asp Pro Ala Gln Arg Ile
 290 295 300

Asp Ser Asp Asp Ala Leu Asn His Asp Phe Phe Trp Ser Asp Pro Met
 305 310 315 320

Pro Ser Asp Leu Lys Gly Met Leu Ser Thr His Leu Thr Ser Met Phe
 325 330 335

Glu Tyr Leu Ala Pro Pro Arg Arg Lys Gly Ser Gln Ile Thr Gln Gln
 340 345 350

Ser Thr Asn Gln Ser Arg Asn Pro Ala Thr Thr Asn Gln
 355 360 365

<210> 76
<211> 324
<212> PRT
<213> Homo sapiens

<400> 76
Met Ala His Ser Pro Val Gln Ser Gly Leu Pro Gly Met Gln Asn Leu
 1 5 10 15

Lys Ala Asp Pro Glu Glu Leu Phe Thr Lys Leu Glu Lys Ile Gly Lys
 20 25 30

Gly Ser Phe Gly Glu Val Phe Lys Gly Ile Asp Asn Arg Thr Gln Lys
 35 40 45

Val Val Ala Ile Lys Ile Ile Asp Leu Glu Ala Glu Asp Glu Ile
 50 55 60

Glu Asp Ile Gln Gln Glu Ile Thr Val Leu Ser Gln Cys Asp Ser Pro
 65 70 75 80

Tyr Val Thr Lys Tyr Tyr Gly Ser Tyr Leu Lys Asp Thr Lys Leu Trp
 85 90 95

Ile Ile Met Glu Tyr Leu Gly Gly Ser Ala Leu Asp Leu Leu Glu
 100 105 110

Pro Gly Pro Leu Asp Glu Thr Gln Ile Ala Thr Ile Leu Arg Glu Ile
 115 120 125

Leu Lys Gly Leu Asp Tyr Leu His Ser Glu Lys Lys Ile His Arg Asp
 130 135 140

Ile Lys Ala Ala Asn Val Leu Leu Ser Glu His Gly Glu Val Lys Leu
 145 150 155 160

Ala Asp Phe Gly Val Ala Gly Gln Leu Thr Asp Thr Gln Ile Lys Arg
 165 170 175

Asn Thr Phe Val Gly Thr Pro Phe Trp Met Ala Pro Glu Val Ile Lys
 180 185 190

Gln Ser Ala Tyr Asp Ser Lys Ala Asp Ile Trp Ser Leu Gly Ile Thr
 195 200 205

Ala Ile Glu Leu Ala Arg Gly Glu Pro Pro His Ser Glu Leu His Pro
 210 215 220

Met Lys Val Leu Phe Leu Ile Pro Lys Asn Asn Pro Pro Thr Leu Glu
 225 230 235 240

Gly Asn Tyr Ser Lys Pro Leu Lys Glu Phe Val Glu Ala Cys Leu Asn
 245 250 255

Lys Glu Pro Ser Phe Arg Pro Thr Ala Lys Glu Leu Leu Lys His Lys
 260 265 270

Phe Ile Leu Arg Asn Ala Lys Lys Thr Ser Tyr Leu Thr Glu Leu Ile
 275 280 285

Asp Arg Tyr Lys Arg Trp Lys Ala Glu Gln Ser His Asp Asp Ser Ser
 290 295 300

Ser Glu Asp Ser Asp Ala Glu Thr Asp Gly Gln Ala Ser Gly Gly Ser
 305 310 315 320

Asp Ser Gly Asp

<210> 77
 <211> 328
 <212> PRT
 <213> Homo sapiens

<400> 77
 Met Glu Gln Pro Pro Ala Pro Lys Ser Lys Leu Lys Lys Leu Ser Glu
 1 5 10 15

Asp Ser Leu Thr Lys Gln Pro Glu Glu Val Phe Asp Val Leu Glu Lys
 20 25 30

Leu Gly Glu Gly Ser Tyr Gly Ser Val Phe Lys Ala Ile His Lys Glu
 35 40 45

Ser Gly Gln Val Val Ala Ile Lys Gln Val Pro Val Glu Ser Asp Leu
 50 55 60

Gln Glu Ile Ile Lys Glu Ile Ser Ile Met Gln Gln Cys Asp Ser Pro
 65 70 75 80

Tyr Val Val Lys Tyr Tyr Gly Ser Tyr Phe Lys Asn Thr Asp Leu Trp
 85 90 95

Ile Val Met Glu Tyr Cys Gly Ala Gly Ser Val Ser Asp Ile Ile Arg
 100 105 110

Leu Arg Asn Lys Thr Leu Ile Glu Asp Glu Ile Ala Thr Ile Leu Lys
 115 120 125

Ser Thr Leu Lys Gly Leu Glu Tyr Leu His Phe Met Arg Lys Ile His
 130 135 140

Arg Asp Ile Lys Ala Gly Asn Ile Leu Leu Asn Thr Glu Gly His Ala
 145 150 155 160

Lys Leu Ala Asp Phe Gly Val Ala Gly Gln Leu Thr Asp Thr Met Ala
 165 170 175

Lys Arg Asn Thr Val Ile Gly Thr Pro Phe Trp Met Ala Pro Glu Val
 180 185 190

Ile Gln Glu Ile Gly Tyr Asn Cys Val Ala Asp Ile Trp Ser Leu Gly
 195 200 205

Ile Thr Ser Ile Glu Met Ala Glu Gly Lys Pro Pro Tyr Ala Asp Ile
 210 215 220

His Pro Met Arg Ala Ile Phe Met Ile Pro Thr Asn Pro Pro Pro Thr
 225 230 235 240

Phe Arg Lys Pro Glu Leu Trp Ser Asp Asp Phe Thr Asp Phe Val Lys
 245 250 255

Lys Cys Leu Val Lys Asn Pro Glu Gln Arg Ala Thr Ala Thr Gln Leu
 260 265 270

Leu Gln His Pro Phe Ile Lys Asn Ala Lys Pro Val Ser Ile Leu Arg
 275 280 285

Asp Leu Ile Thr Glu Ala Met Glu Ile Lys Ala Lys Arg His Asp Glu
 290 295 300

Gln Gln Arg Glu Leu Glu Glu Glu Asn Ser Asp Glu Asp Glu
 305 310 315 320

Leu Asp Ser His Thr Met Val Lys
 325

<210> 78

<211> 322

<212> PRT

<213> Homo sapiens

<400> 78

Met Glu Leu Arg Asp Val Ser Leu Gln Asp Pro Arg Asp Arg Phe Glu
 1 5 10 15

Leu Leu Gln Arg Val Gly Ala Gly Thr Tyr Gly Asp Val Tyr Lys Ala
 20 25 30

Arg Asp Thr Val Thr Ser Glu Leu Ala Ala Val Lys Ile Val Lys Leu
 35 40 45

Asp Pro Gly Asp Asp Ile Ser Ser Leu Gln Gln Glu Ile Thr Ile Leu
 50 55 60

Arg Glu Cys Arg His Pro Asn Val Val Ala Tyr Ile Gly Ser Tyr Leu
 65 70 75 80

Arg Asn Asp Arg Leu Trp Ile Cys Met Glu Phe Cys Gly Gly Ser
 85 90 95

Leu Gln Glu Ile Tyr His Ala Thr Gly Pro Leu Glu Glu Arg Gln Ile
 100 105 110

Ala Tyr Val Cys Arg Glu Arg Leu Lys Gly Leu His His Leu His Ser
 115 120 125

Gln Gly Lys Ile His Arg Asp Ile Lys Gly Ala Asn Leu Leu Leu Thr
 130 135 140

Leu Gln Gly Asp Val Lys Leu Ala Asp Phe Gly Val Ser Gly Glu Leu
 145 150 155 160

Thr Ala Ser Val Ala Lys Arg Arg Ser Phe Ile Gly Thr Pro Tyr Trp
 165 170 175

Met Ala Pro Glu Val Ala Ala Val Glu Arg Lys Gly Gly Tyr Asn Glu
 180 185 190

Leu Cys Asp Val Trp Ala Leu Gly Ile Thr Ala Ile Glu Leu Gly Glu
 195 200 205

Leu Gln Pro Pro Leu Phe His Leu His Pro Met Arg Ala Leu Met Leu
 210 215 220

Met Ser Lys Ser Ser Phe Gln Pro Pro Lys Leu Arg Asp Lys Thr Arg
 225 230 235 240

Trp Thr Gln Asn Phe His His Phe Leu Lys Leu Ala Leu Thr Lys Asn
 245 250 255

Pro Lys Lys Arg Pro Thr Ala Glu Lys Leu Leu Gln His Pro Phe Thr
 260 265 270

Thr Gln Gln Leu Pro Arg Ala Leu Leu Thr Gln Leu Leu Asp Lys Ala
 275 280 285

Ser Asp Pro His Leu Gly Thr Pro Ser Pro Glu Asp Cys Glu Leu Glu
 290 295 300

Thr Tyr Asp Met Phe Pro Asp Thr Ile His Ser Arg Gly Gln His Gly
 305 310 315 320

Pro Ala

<210> 79
 <211> 339
 <212> PRT
 <213> Homo sapiens

<400> 79
 Met Ala Asn Asp Ser Pro Ala Lys Ser Leu Val Asp Ile Asp Leu Ser
 1 5 10 15

Ser Leu Arg Asp Pro Ala Gly Ile Phe Glu Leu Val Glu Val Val Gly
 20 25 30

Asn Gly Thr Tyr Gly Gln Val Tyr Lys Gly Arg His Val Lys Thr Gly
 35 40 45

Gln Leu Ala Ala Ile Lys Val Met Asp Val Thr Glu Asp Glu Glu
 50 55 60

Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg
 65 70 75 80
 Asn Ile Ala Thr Tyr Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly
 85 90 95
 His Asp Asp Gln Leu Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser
 100 105 110
 Ile Thr Asp Leu Val Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp
 115 120 125
 Trp Ile Ala Tyr Ile Ser Arg Glu Ile Leu Arg Gly Leu Ala His Leu
 130 135 140
 His Ile His His Val Ile His Arg Asp Ile Lys Gly Gln Asn Val Leu
 145 150 155 160
 Leu Thr Glu Asn Ala Glu Val Lys Leu Val Asp Phe Gly Val Ser Ala
 165 170 175
 Gln Leu Asp Arg Thr Val Gly Arg Arg Asn Thr Phe Ile Gly Thr Pro
 180 185 190
 Tyr Trp Met Ala Pro Glu Val Ile Ala Cys Asp Glu Asn Pro Asp Ala
 195 200 205
 Thr Tyr Asp Tyr Arg Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile
 210 215 220
 Glu Met Ala Glu Gly Ala Pro Pro Leu Cys Asp Met His Pro Met Arg
 225 230 235 240
 Ala Leu Phe Leu Ile Pro Arg Asn Pro Pro Pro Arg Leu Lys Ser Lys
 245 250 255
 Lys Trp Ser Lys Lys Phe Phe Ser Phe Ile Glu Gly Cys Leu Val Lys
 260 265 270
 Asn Tyr Met Gln Arg Pro Ser Thr Glu Gln Leu Leu Lys His Pro Phe
 275 280 285
 Ile Arg Asp Gln Pro Asn Glu Arg Gln Val Arg Ile Gln Leu Lys Asp
 290 295 300
 His Ile Asp Arg Thr Arg Lys Lys Arg Gly Glu Lys Asp Glu Thr Glu
 305 310 315 320
 Tyr Glu Tyr Ser Gly Ser Glu Glu Glu Glu Glu Val Pro Glu Gln
 325 330 335
 Glu Gly Glu

<210> 80
 <211> 344
 <212> PRT
 <213> Homo sapiens

<400> 80
 Met Ala Phe Ala Asn Phe Arg Arg Ile Leu Arg Leu Ser Thr Phe Glu
 1 5 10 15

Lys Arg Lys Ser Arg Glu Tyr Glu His Val Arg Arg Asp Leu Asp Pro
 20 25 30

Asn Glu Val Trp Glu Ile Val Gly Glu Leu Gly Asp Gly Ala Phe Gly
 35 40 45

Lys Val Tyr Lys Ala Lys Asn Lys Glu Thr Gly Ala Leu Ala Ala Ala
 50 55 60

Lys Val Ile Glu Thr Lys Ser Glu Glu Leu Glu Asp Tyr Ile Val
 65 70 75 80

Glu Ile Glu Ile Leu Ala Thr Cys Asp His Pro Tyr Ile Val Lys Leu
 85 90 95

Leu Gly Ala Tyr Tyr His Asp Gly Lys Leu Trp Ile Met Ile Glu Phe
 100 105 110

Cys Pro Gly Gly Ala Val Asp Ala Ile Met Leu Glu Leu Asp Arg Gly
 115 120 125

Leu Thr Glu Pro Gln Ile Gln Val Val Cys Arg Gln Met Leu Glu Ala
 130 135 140

Leu Asn Phe Leu His Ser Lys Arg Ile Ile His Arg Asp Leu Lys Ala
 145 150 155 160

Gly Asn Val Leu Met Thr Leu Glu Gly Asp Ile Arg Leu Ala Asp Phe
 165 170 175

Gly Val Ser Ala Lys Asn Leu Lys Thr Leu Gln Lys Arg Asp Ser Phe
 180 185 190

Ile Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Val Met Cys Glu Thr
 195 200 205

Met Lys Asp Thr Pro Tyr Asp Tyr Lys Ala Asp Ile Trp Ser Leu Gly
 210 215 220

Ile Thr Leu Ile Glu Met Ala Gln Ile Glu Pro Pro His His Glu Leu
 225 230 235 240

Asn Pro Met Arg Val Leu Leu Lys Ile Ala Lys Ser Asp Pro Pro Thr
 245 250 255

Leu Leu Thr Pro Ser Lys Trp Ser Val Glu Phe Arg Asp Phe Leu Lys
 260 265 270

100

Ile Ala Leu Asp Lys Asn Pro Glu Thr Arg Pro Ser Ala Ala Gln Leu
275 280 285

Leu Glu His Pro Phe Val Ser Ser Ile Thr Ser Asn Lys Ala Leu Arg
290 295 300

Glu Leu Val Ala Glu Ala Lys Ala Glu Val Met Glu Glu Ile Glu Asp
305 310 315 320

Gly Arg Asp Glu Gly Glu Glu Asp Ala Val Asp Ala Ala Ser Thr
325 330 335

Leu Glu Asn His Thr Gln Asn Ser
340

<210> 81

<211> 337

<212> PRT

<213> Homo sapiens

<400> 81

Asp Gly Leu Ala Met Ser Leu His Phe Met Thr Leu Gly Gly Ser Ser
1 5 10 15

Leu Ser Pro Thr Glu Gly Lys Gly Ser Gly Leu Gln Gly His Ile Ile
20 25 30

Glu Asn Pro Gln Tyr Phe Ser Asp Ala Cys Val His His Ile Lys Arg
35 40 45

Arg Asp Ile Val Leu Lys Trp Glu Leu Gly Glu Gly Ala Phe Gly Lys
50 55 60

Val Phe Leu Ala Glu Cys His Asn Leu Leu Pro Glu Gln Asp Lys Met
65 70 75 80

Leu Val Ala Val Lys Ala Leu Lys Glu Ala Ser Glu Ser Ala Arg Gln
85 90 95

Asp Phe Gln Arg Glu Ala Glu Leu Leu Thr Met Leu Gln His Gln His
100 105 110

Ile Val Arg Phe Phe Gly Val Cys Thr Glu Gly Arg Pro Leu Leu Met
115 120 125

Val Phe Glu Tyr Met Arg His Gly Asp Leu Asn Arg Phe Leu Arg Ser
130 135 140

His Gly Pro Asp Ala Lys Leu Leu Ala Gly Gly Glu Asp Val Ala Pro
145 150 155 160

Gly Pro Leu Gly Leu Gly Gln Leu Leu Ala Val Ala Ser Gln Val Ala
165 170 175

Ala Gly Met Val Tyr Leu Ala Gly Leu His Phe Val His Arg Asp Leu
180 185 190

Ala Thr Arg Asn Cys Leu Val Gly Gln Gly Leu Val Val Lys Ile Gly
 195 200 205

Asp Phe Gly Met Ser Arg Asp Ile Tyr Ser Thr Asp Tyr Tyr Arg Val
 210 215 220

Gly Gly Arg Thr Met Leu Pro Ile Arg Trp Met Pro Pro Glu Ser Ile
 225 230 235 240

Leu Tyr Arg Lys Phe Thr Thr Glu Ser Asp Val Trp Ser Phe Gly Val
 245 250 255

Val Leu Trp Glu Ile Phe Thr Tyr Gly Lys Gln Pro Trp Tyr Gln Leu
 260 265 270

Ser Asn Thr Glu Ala Ile Asp Cys Ile Thr Gln Gly Arg Glu Leu Glu
 275 280 285

Arg Pro Arg Ala Cys Pro Pro Glu Val Tyr Ala Ile Met Arg Gly Cys
 290 295 300

Trp Gln Arg Glu Pro Gln Gln Arg His Ser Ile Lys Asp Val His Ala
 305 310 315 320

Arg Leu Gln Ala Leu Ala Gln Ala Pro Pro Val Tyr Leu Asp Val Leu
 325 330 335

Gly

<210> 82
 <211> 345
 <212> PRT
 <213> Homo sapiens

<400> 82
 Lys Asn Lys Lys Arg Glu Ser Ala Ala Val Thr Leu Thr Thr Leu Pro
 1 5 10 15

Ser Glu Leu Leu Leu Asp Arg Leu His Pro Asn Pro Met Tyr Gln Arg
 20 25 30

Met Pro Leu Leu Leu Asn Pro Lys Leu Leu Ser Leu Glu Tyr Pro Arg
 35 40 45

Asn Asn Ile Glu Tyr Val Arg Asp Ile Gly Glu Gly Ala Phe Gly Arg
 50 55 60

Val Phe Gln Ala Arg Ala Pro Gly Leu Leu Pro Tyr Glu Pro Phe Thr
 65 70 75 80

Met Val Ala Val Lys Met Leu Lys Glu Glu Ala Ser Ala Asp Met Gln
 85 90 95

Ala Asp Phe Gln Arg Glu Ala Ala Leu Met Ala Glu Phe Asp Asn Pro
 100 105 110

Asn Ile Val Lys Leu Leu Gly Val Cys Ala Val Gly Lys Pro Met Cys
 115 120 125

 Leu Leu Phe Glu Tyr Met Ala Tyr Gly Asp Leu Asn Glu Phe Leu Arg
 130 135 140

 Ser Met Ser Pro His Thr Val Cys Ser Leu Ser His Ser Asp Leu Ser
 145 150 155 160

 Met Arg Ala Gln Val Ser Ser Pro Gly Pro Pro Pro Leu Ser Cys Ala
 165 170 175

 Glu Gln Leu Cys Ile Ala Arg Gln Val Ala Ala Gly Met Ala Tyr Leu
 180 185 190

 Ser Glu Arg Lys Phe Val His Arg Asp Leu Ala Thr Arg Asn Cys Leu
 195 200 205

 Val Gly Glu Asn Met Val Val Lys Ile Ala Asp Phe Gly Leu Ser Arg
 210 215 220

 Asn Ile Tyr Ser Ala Asp Tyr Tyr Lys Ala Asn Glu Asn Asp Ala Ile
 225 230 235 240

 Pro Ile Arg Trp Met Pro Pro Glu Ser Ile Phe Tyr Asn Arg Tyr Thr
 245 250 255

 Thr Glu Ser Asp Val Trp Ala Tyr Gly Val Val Leu Trp Glu Ile Phe
 260 265 270

 Ser Tyr Gly Leu Gln Pro Tyr Tyr Gly Met Ala His Glu Glu Val Ile
 275 280 285

 Tyr Tyr Val Arg Asp Gly Asn Ile Leu Ser Cys Pro Glu Asn Cys Pro
 290 295 300

 Val Glu Leu Tyr Asn Leu Met Arg Leu Cys Trp Ser Lys Leu Pro Ala
 305 310 315 320

 Asp Arg Pro Ser Phe Thr Ser Ile His Arg Ile Leu Glu Arg Met Cys
 325 330 335

 Glu Arg Ala Glu Gly Thr Val Ser Val
 340 345

 <210> 83
 <211> 376
 <212> PRT
 <213> Homo sapiens

 <400> 83
 Phe Phe Ile Cys Val Cys Arg Asn Asn Gln Lys Ser Ser Ser Ala Pro
 1 5 10 15

 Val Gln Arg Gln Pro Lys His Val Arg Gly Gln Asn Val Glu Met Ser
 20 25 30

Met Leu Asn Ala Tyr Lys Pro Lys Ser Lys Ala Lys Glu Leu Pro Leu
 35 40 45

 Ser Ala Val Arg Phe Met Glu Glu Leu Gly Glu Cys Ala Phe Gly Lys
 50 55 60

 Ile Tyr Lys Gly His Leu Tyr Leu Pro Gly Met Asp His Ala Gln Leu
 65 70 75 80

 Val Ala Ile Lys Thr Leu Lys Asp Tyr Asn Asn Pro Gln Gln Trp Met
 85 90 95

 Glu Phe Gln Gln Glu Ala Ser Leu Met Ala Glu Leu His His Pro Asn
 100 105 110

 Ile Val Cys Leu Leu Gly Ala Val Thr Gln Glu Gln Pro Val Cys Met
 115 120 125

 Leu Phe Glu Tyr Ile Asn Gln Gly Asp Leu His Glu Phe Leu Ile Met
 130 135 140

 Arg Ser Pro His Ser Asp Val Gly Cys Ser Ser Asp Glu Asp Gly Thr
 145 150 155 160

 Val Lys Ser Ser Leu Asp His Gly Asp Phe Leu His Ile Ala Ile Gln
 165 170 175

 Ile Ala Ala Gly Met Glu Tyr Leu Ser Ser His Phe Phe Val His Lys
 180 185 190

 Asp Leu Ala Ala Arg Asn Ile Leu Ile Gly Glu Gln Leu His Val Lys
 195 200 205

 Ile Ser Asp Leu Gly Leu Ser Arg Glu Ile Tyr Ser Ala Asp Tyr Tyr
 210 215 220

 Arg Val Gln Ser Lys Ser Leu Leu Pro Ile Arg Trp Met Pro Pro Glu
 225 230 235 240

 Ala Ile Met Tyr Gly Lys Phe Ser Ser Asp Ser Asp Ile Trp Ser Phe
 245 250 255

 Gly Val Val Leu Trp Glu Ile Phe Ser Phe Gly Leu Gln Pro Tyr Tyr
 260 265 270

 Gly Phe Ser Asn Gln Glu Val Ile Glu Met Val Arg Lys Arg Gln Leu
 275 280 285

 Leu Pro Cys Ser Glu Asp Cys Pro Pro Arg Met Tyr Ser Leu Met Thr
 290 295 300

 Glu Cys Trp Asn Glu Ile Pro Ser Arg Arg Pro Arg Phe Lys Asp Ile
 305 310 315 320

 His Val Arg Leu Arg Ser Trp Glu Gly Leu Ser Ser His Thr Ser Ser
 325 330 335

Thr Thr Pro Ser Gly Gly Asn Ala Thr Thr Gln Thr Thr Ser Leu Ser
 340 345 350
 Ala Ser Pro Val Ser Asn Leu Ser Asn Pro Arg Tyr Pro Asn Tyr Met
 355 360 365
 Phe Pro Ser Gln Gly Ile Thr Pro
 370 375

 <210> 84
 <211> 300
 <212> PRT
 <213> Homo sapiens

 <400> 84
 Gly Leu Lys Lys Gln Glu Glu Glu Met Asp Phe Arg Ser Gly Ser
 1 5 10 15
 Pro Ser Asp Asn Ser Gly Ala Glu Glu Met Glu Val Ser Leu Ala Lys
 20 25 30
 Pro Lys His Arg Val Thr Met Asn Glu Phe Glu Tyr Leu Lys Leu Leu
 35 40 45
 Gly Lys Gly Thr Phe Gly Lys Val Ile Leu Val Lys Glu Lys Ala Thr
 50 55 60
 Gly Arg Tyr Tyr Ala Met Lys Ile Leu Lys Lys Glu Val Ile Val 'Ala
 65 70 75 80
 Lys Asp Glu Val Ala His Thr Leu Thr Glu Asn Arg Val Leu Gln Asn
 85 90 95
 Ser Arg His Pro Phe Leu Thr Ala Leu Lys Tyr Ser Phe Gln Thr His
 100 105 110
 Asp Arg Leu Cys Phe Val Met Glu Tyr Ala Asn Gly Gly Glu Leu Phe
 115 120 125
 Phe His Leu Ser Arg Glu Arg Val Phe Ser Glu Asp Arg Ala Arg Phe
 130 135 140
 Tyr Gly Ala Glu Ile Val Ser Ala Leu Asp Tyr Leu His Ser Glu Lys
 145 150 155 160
 Asn Val Val Tyr Arg Asp Leu Lys Leu Glu Asn Leu Met Leu Asp Lys
 165 170 175
 Asp Gly His Ile Lys Ile Thr Asp Phe Gly Leu Cys Lys Glu Gly Ile
 180 185 190
 Lys Asp Gly Ala Thr Met Lys Thr Phe Cys Gly Thr Pro Glu Tyr Leu
 195 200 205
 Ala Pro Glu Val Leu Glu Asp Asn Asp Tyr Gly Arg Ala Val Asp Trp
 210 215 220

Trp Gly Leu Gly Val Val Met Tyr Glu Met Met Cys Gly Arg Leu Pro
 225 230 235 240
 Phe Tyr Asn Gln Asp His Glu Lys Leu Phe Glu Leu Ile Leu Met Glu
 245 250 255
 Glu Ile Arg Phe Pro Arg Thr Leu Gly Pro Glu Ala Lys Ser Leu Leu
 260 265 270
 Ser Gly Leu Leu Lys Lys Asp Pro Lys Gln Arg Leu Gly Gly Ser
 275 280 285
 Glu Asp Ala Lys Glu Ile Met Gln His Arg Phe Phe
 290 295 300

<210> 85
 <211> 308
 <212> PRT
 <213> Homo sapiens

<400> 85
 Ala Cys Lys His Pro Glu Val Gln Ser Ile Leu Lys Ile Ser Gln Pro
 1 5 10 15
 Gln Glu Pro Glu Leu Met Asn Ala Asn Pro Ser Pro Pro Pro Ser Pro
 20 25 30
 Ser Gln Gln Ile Asn Leu Gly Pro Ser Ser Asn Pro His Ala Lys Pro
 35 40 45
 Ser Asp Phe His Phe Leu Lys Val Ile Gly Lys Gly Ser Phe Gly Lys
 50 55 60
 Val Leu Leu Ala Arg His Lys Ala Glu Glu Val Phe Tyr Ala Val Lys
 65 70 75 80
 Val Leu Gln Lys Lys Ala Ile Leu Lys Lys Lys Glu Glu Lys His Ile
 85 90 95
 Met Ser Glu Arg Asn Val Leu Leu Lys Asn Val Lys His Pro Phe Leu
 100 105 110
 Val Gly Leu His Phe Ser Phe Gln Thr Ala Asp Lys Leu Tyr Phe Val
 115 120 125
 Leu Asp Tyr Ile Asn Gly Gly Glu Leu Phe Tyr His Leu Gln Arg Glu
 130 135 140
 Arg Cys Phe Leu Glu Pro Arg Ala Arg Phe Tyr Ala Ala Glu Ile Ala
 145 150 155 160
 Ser Ala Leu Gly Tyr Leu His Ser Leu Asn Ile Val Tyr Arg Asp Leu
 165 170 175
 Lys Pro Glu Asn Ile Leu Leu Asp Ser Gln Gly His Ile Val Leu Thr
 180 185 190

Asp Phe Gly Leu Cys Lys Glu Asn Ile Glu His Asn Ser Thr Thr Ser
 195 200 205
 Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu His Lys
 210 215 220
 Gln Pro Tyr Asp Arg Thr Val Asp Trp Trp Cys Leu Gly Ala Val Leu
 225 230 235 240
 Tyr Glu Met Leu Tyr Gly Leu Pro Pro Phe Tyr Ser Arg Asn Thr Ala
 245 250 255
 Glu Met Tyr Asp Asn Ile Leu Asn Lys Pro Leu Gln Leu Lys Pro Asn
 260 265 270
 Ile Thr Asn Ser Ala Arg His Leu Leu Glu Gly Leu Leu Gln Lys Asp
 275 280 285
 Arg Thr Lys Arg Leu Gly Ala Lys Asp Asp Phe Met Glu Ile Lys Ser
 290 295 300
 His Val Phe Phe
 305

<210> 86
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 86
 Lys Ser Ser Arg Asp Pro Pro Ser Ser Pro Ser Ser Leu Ser Ser Pro
 1 5 10 15
 Ile Gln Glu Ser Thr Ala Pro Glu Leu Pro Ser Glu Thr Gln Glu Thr
 20 25 30
 Pro Gly Pro Ala Leu Cys Ser Pro Leu Arg Lys Ser Pro Leu Thr Leu
 35 40 45
 Glu Asp Phe Lys Phe Leu Ala Val Leu Gly Arg Gly His Phe Gly Lys
 50 55 60
 Val Leu Leu Ser Glu Phe Arg Pro Ser Gly Glu Leu Phe Ala Ile Lys
 65 70 75 80
 Ala Leu Lys Lys Gly Asp Ile Val Ala Arg Asp Glu Val Glu Ser Leu
 85 90 95
 Met Cys Glu Lys Arg Ile Leu Ala Ala Val Thr Ser Ala Gly His Pro
 100 105 110
 Phe Leu Val Asn Leu Phe Gly Cys Phe Gln Thr Pro Glu His Val Cys
 115 120 125
 Phe Val Met Glu Tyr Ser Ala Gly Gly Asp Leu Met Leu His Ile His
 130 135 140

Ser Asp Val Phe Ser Glu Pro Arg Ala Ile Phe Tyr Ser Ala Cys Val
 145 150 155 160
 Val Leu Gly Leu Gln Phe Leu His Glu His Lys Ile Val Tyr Arg Asp
 165 170 175
 Leu Lys Leu Asp Asn Leu Leu Asp Thr Glu Gly Tyr Val Lys Ile
 180 185 190
 Ala Asp Phe Gly Leu Cys Lys Glu Gly Met Gly Tyr Gly Asp Arg Thr
 195 200 205
 Ser Thr Phe Cys Gly Thr Pro Glu Phe Leu Ala Pro Glu Val Leu Thr
 210 215 220
 Asp Thr Ser Tyr Thr Arg Ala Val Asp Trp Trp Gly Leu Gly Val Leu
 225 230 235 240
 Leu Tyr Glu Met Leu Val Gly Glu Ser Pro Phe Pro Gly Asp Asp Glu
 245 250 255
 Glu Glu Val Phe Asp Ser Ile Val Asn Asp Glu Val Arg Tyr Pro Arg
 260 265 270
 Phe Leu Ser Ala Glu Ala Ile Gly Ile Met Arg Arg Leu Leu Arg Arg
 275 280 285
 Asn Pro Glu Arg Arg Leu Gly Ser Ser Glu Arg Asp Ala Glu Asp Val
 290 295 300
 Lys Lys Gln Pro Phe Phe
 305 310

<210> 87
 <211> 309
 <212> PRT
 <213> Homo sapiens

<400> 87
 Pro Ile Pro Glu Gly Asp Glu Glu Gly Asn Met Glu Leu Arg Gln Lys
 1 5 10 15
 Phe Glu Lys Ala Lys Leu Gly Pro Ala Gly Asn Lys Val Ile Ser Pro
 20 25 30
 Ser Glu Asp Arg Lys Gln Pro Ser Asn Asn Leu Asp Arg Val Lys Leu
 35 40 45
 Thr Asp Phe Asn Phe Leu Met Val Leu Gly Lys Gly Ser Phe Gly Lys
 50 55 60
 Val Met Leu Ala Asp Arg Lys Gly Thr Glu Glu Leu Tyr Ala Ile Lys
 65 70 75 80
 Ile Leu Lys Lys Asp Val Val Ile Gln Asp Asp Asp Val Glu Cys Thr
 85 90 95

Met Val Glu Lys Arg Val Leu Ala Leu Leu Asp Pro Pro Phe Leu
 100 105 110
 Thr Gln Leu His Ser Cys Phe Gln Thr Val Asp Arg Leu Tyr Phe Val
 115 120 125
 Met Glu Tyr Val Asn Gly Gly Asp Leu Met Tyr His Ile Gln Gln Val
 130 135 140
 Gly Lys Phe Lys Glu Pro Gln Ala Val Phe Tyr Ala Ala Glu Ile Ser
 145 150 155 160
 Ile Gly Leu Phe Phe Leu His Lys Arg Gly Ile Ile Tyr Arg Asp Leu
 165 170 175
 Lys Leu Asp Asn Val Met Leu Asp Ser Glu Gly His Ile Lys Ile Ala
 180 185 190
 Asp Phe Gly Met Cys Lys Glu His Met Met Asp Gly Val Thr Thr Arg
 195 200 205
 Thr Phe Cys Gly Thr Pro Asp Tyr Ile Ala Pro Glu Ile Ile Ala Tyr
 210 215 220
 Gln Pro Tyr Gly Lys Ser Val Asp Trp Trp Ala Tyr Gly Val Leu Leu
 225 230 235 240
 Tyr Glu Met Leu Ala Gly Gln Pro Pro Phe Asp Gly Glu Asp Glu Asp
 245 250 255
 Glu Leu Phe Gln Ser Ile Met Glu His Asn Val Ser Tyr Pro Lys Ser
 260 265 270
 Leu Ser Lys Glu Ala Val Ser Ile Cys Lys Gly Leu Met Thr Lys His
 275 280 285
 Pro Ala Lys Arg Leu Gly Cys Gly Pro Glu Gly Glu Arg Asp Val Arg
 290 295 300
 Glu His Ala Phe Phe
 305

<210> 88
 <211> 305
 <212> PRT
 <213> Homo sapiens

<400> 88
 Ser Arg Arg Ser Asp Ser Ala Ser Ser Glu Pro Val Gly Ile Tyr Gln
 1 5 10 15
 Gly Phe Glu Lys Lys Thr Gly Val Ala Gly Glu Asp Met Gln Asp Asn
 20 25 30
 Ser Gly Thr Tyr Gly Lys Ile Trp Glu Gly Ser Ser Lys Cys Asn Ile
 35 40 45

109

Asn Asn Phe Ile Phe His Lys Val Leu Gly Lys Gly Ser Phe Gly Lys
50 55 60 .

Val Leu Leu Gly Glu Leu Lys Gly Arg Gly Glu Tyr Phe Ala Ile Lys
65 70 75 80

Ala Leu Lys Lys Asp Val Val Leu Ile Asp Asp Asp Val Glu Cys Thr
85 90 95

Met Val Glu Lys Arg Val Leu Thr Leu Ala Ala Glu Asn Pro Phe Leu
100 105 110

Thr His Leu Ile Cys Thr Phe Gln Thr Lys Asp His Leu Phe Phe Val
115 120 125

Met Glu Phe Leu Asn Gly Gly Asp Leu Met Tyr His Ile Gln Asp Lys
130 135 140

Gly Arg Phe Glu Leu Tyr Arg Ala Thr Phe Tyr Ala Ala Glu Ile Met
145 150 155 160

Cys Gly Leu Gln Phe Leu His Ser Lys Gly Ile Ile Tyr Arg Asp Leu
165 170 175

Lys Leu Asp Asn Val Leu Leu Asp Arg Asp Gly His Ile Lys Ile Ala
180 185 190

Asp Phe Gly Met Cys Lys Glu Asn Ile Phe Gly Glu Ser Arg Ala Ser
195 200 205

Thr Phe Cys Gly Thr Pro Asp Tyr Ile Ala Pro Glu Ile Leu Gln Gly
210 215 220

Leu Lys Tyr Thr Phe Ser Val Asp Trp Trp Ser Phe Gly Val Leu Leu
225 230 235 240

Tyr Glu Met Leu Ile Gly Gln Ser Pro Phe His Gly Asp Asp Glu Asp
245 250 255

Glu Leu Phe Glu Ser Ile Arg Val Asp Thr Pro His Tyr Pro Arg Trp
260 265 270

Ile Thr Lys Glu Ser Lys Asp Ile Leu Glu Lys Leu Phe Glu Arg Glu
275 280 285

Pro Thr Lys Arg Leu Gly Val Thr Gly Asn Ile Lys Ile His Pro Phe
290 295 300

Phe
305

<210> 89
<211> 310
<212> PRT
<213> Homo sapiens

110

<400> 89
Leu Met Glu Leu Val Pro Leu Asp Pro Glu Asn Gly Gln Thr Ser Gly
1 5 10 15

Glu Glu Ala Gly Leu Gln Pro Ser Lys Asp Glu Gly Val Leu Lys Glu
20 25 30

Ile Ser Ile Thr His His Val Lys Ala Gly Ser Glu Lys Ala Asp Pro
35 40 45

Ser His Phe Glu Leu Leu Lys Val Leu Gly Gln Gly Ser Phe Gly Lys
50 55 60

Val Phe Leu Val Arg Lys Val Thr Arg Pro Asp Ser Gly His Leu Tyr
65 70 75 80

Ala Met Lys Val Leu Lys Lys Ala Thr Leu Lys Val Arg Asp Arg Val
85 90 95

Arg Thr Lys Met Glu Arg Asp Ile Leu Ala Asp Val Asn His Pro Phe
100 105 110

Val Val Lys Leu His Tyr Ala Phe Gln Thr Glu Gly Lys Leu Tyr Leu
115 120 125

Ile Leu Asp Phe Leu Arg Gly Gly Asp Leu Phe Thr Arg Leu Ser Lys
130 135 140

Glu Val Met Phe Thr Glu Glu Asp Val Lys Phe Tyr Leu Ala Glu Leu
145 150 155 160

Ala Leu Gly Leu Asp His Leu His Ser Leu Gly Ile Ile Tyr Arg Asp
165 170 175

Leu Lys Pro Glu Asn Ile Leu Leu Asp Glu Glu Gly His Ile Lys Leu
180 185 190

Thr Asp Phe Gly Leu Ser Lys Glu Ala Ile Asp His Glu Lys Lys Ala
195 200 205

Tyr Ser Phe Cys Gly Thr Val Glu Tyr Met Ala Pro Glu Val Val Asn
210 215 220

Arg Gln Gly His Ser His Ser Ala Asp Trp,Trp Ser Tyr Gly Val Leu
225 230 235 240

Met Phe Glu Met Leu Thr Gly Ser Leu Pro Phe Gln Gly Lys Asp Arg
245 250 255

Lys Glu Thr Met Thr Leu Ile Leu Lys Ala Lys Leu Gly Met Pro Gln
260 265 270

Phe Leu Ser Thr Glu Ala Gln Ser Leu Leu Arg Ala Leu Phe Lys Arg
275 280 285

Asn Pro Ala Asn Arg Leu Gly Ser Gly Pro Asp Gly Ala Glu Glu Ile
290 295 300

Lys Arg His Val Phe Tyr
 305 310

<210> 90
 <211> 317
 <212> PRT
 <213> Homo sapiens

<400> 90
 Met Asp Gln Tyr Cys Ile Leu Gly Arg Ile Gly Glu Gly Ala His Gly
 1 5 10 15
 Ile Val Phe Lys Ala Lys His Val Glu Thr Gly Glu Ile Ile Ala Leu
 20 25 30
 Lys Lys Val Ala Leu Arg Arg Leu Glu Asp Gly Phe Pro Asn Gln Ala
 35 40 45
 Leu Arg Glu Ile Lys Ala Leu Gln Glu Met Glu Asp Asn Gln Tyr Val
 50 55 60
 Val Gln Leu Lys Ala Val Phe Pro His Gly Gly Phe Val Leu Ala
 65 70 75 80
 Phe Glu Phe Met Leu Ser Asp Leu Ala Glu Val Val Arg His Ala Gln
 85 90 95
 Arg Pro Leu Ala Gln Ala Gln Val Lys Ser Tyr Leu Gln Met Leu Leu
 100 105 110
 Lys Gly Val Ala Phe Cys His Ala Asn Asn Ile Val His Arg Asp Leu
 115 120 125
 Lys Pro Ala Asn Leu Leu Ile Ser Ala Ser Gly Gln Leu Lys Ile Ala
 130 135 140
 Asp Phe Gly Leu Ala Arg Val Phe Ser Pro Asp Gly Ser Arg Leu Tyr
 145 150 155 160
 Thr His Gln Val Ala Thr Arg Ser Val Gly Cys Ile Met Gly Glu Leu
 165 170 175
 Leu Asn Gly Ser Pro Leu Phe Pro Gly Lys Asn Asp Ile Glu Gln Leu
 180 185 190
 Cys Tyr Val Leu Arg Ile Leu Gly Thr Pro Asn Pro Gln Val Trp Pro
 195 200 205
 Glu Leu Thr Glu Leu Pro Asp Tyr Asn Lys Ile Ser Phe Lys Glu Gln
 210 215 220
 Val Pro Met Pro Leu Glu Glu Val Leu Pro Asp Val Ser Pro Gln Ala
 225 230 235 240
 Leu Asp Leu Leu Gly Gln Phe Leu Leu Tyr Pro Pro His Gln Arg Ile
 245 250 255

Ala Ala Ser Lys Ala Leu Leu His Gln Tyr Phe Phe Thr Ala Pro Leu
 260 265 270
 Pro Ala His Pro Ser Glu Leu Pro Ile Pro Gln Arg Leu Gly Gly Pro
 275 280 285
 Ala Pro Lys Ala His Pro Gly Pro Pro His Ile His Asp Phe His Val
 290 295 300
 Asp Arg Pro Leu Glu Gly Val Ala Val Glu Pro Arg Ala
 305 310 315

<210> 91
 <211> 331
 <212> PRT
 <213> Homo sapiens

<400> 91
 Met Pro Ala Gly Gly Arg Ala Gly Ser Leu Lys Asp Pro Asp Val Ala
 1 5 10 15
 Glu Leu Phe Phe Lys Asp Asp Pro Glu Lys Leu Phe Ser Asp Leu Arg
 20 25 30
 Glu Ile Gly His Gly Ser Phe Gly Ala Val Tyr Phe Ala Arg Asp Val
 35 40 45
 Arg Asn Ser Glu Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys
 50 55 60
 Gln Ser Asn Glu Lys Trp Gln Asp Ile Ile Lys Glu Val Arg Phe Leu
 65 70 75 80
 Gln Lys Leu Arg His Pro Asn Thr Ile Gln Tyr Arg Gly Cys Tyr Leu
 85 90 95
 Arg Glu His Thr Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala
 100 105 110
 Ser Asp Leu Leu Glu Val His Lys Lys Pro Leu Gln Glu Val Glu Ile
 115 120 125
 Ala Ala Val Thr His Gly Ala Leu Gln Gly Leu Ala Tyr Leu His Ser
 130 135 140
 His Asn Met Ile His Arg Asp Val Lys Ala Gly Asn Ile Leu Leu Ser
 145 150 155 160
 Glu Pro Gly Leu Val Lys Leu Gly Asp Phe Gly Ser Ala Ser Ile Met
 165 170 175
 Ala Pro Ala Asn Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu
 180 185 190
 Val Ile Leu Ala Met Asp Glu Gly Gln Tyr Asp Gly Lys Val Asp Val
 195 200 205

Trp Ser Leu Gly Ile Thr Cys Ile Glu Leu Ala Glu Arg Lys Pro Pro
 210 215 220
 Leu Phe Asn Met Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn
 225 230 235 240
 Glu Ser Pro Val Leu Gln Ser Gly His Trp Ser Glu Tyr Phe Arg Asn
 245 250 255
 Phe Val Asp Ser Cys Leu Gln Lys Ile Pro Gln Asp Arg Pro Thr Ser
 260 265 270
 Glu Val Leu Leu Lys His Arg Phe Val Leu Arg Glu Arg Pro Pro Thr
 275 280 285
 Val Ile Met Asp Leu Ile Gln Arg Thr Lys Asp Ala Val Arg Glu Leu
 290 295 300
 Asp Asn Leu Gln Tyr Arg Lys Met Lys Lys Ile Leu Phe Gln Glu Ala
 305 310 315 320
 Pro Asn Gly Pro Gly Ala Glu Ala Pro Glu Glu
 325 330

<210> 92
 <211> 357
 <212> PRT
 <213> Homo sapiens

<400> 92
 Ser Ile Pro Lys Leu Ala Asn Ser Glu Lys Gln Gly Met Arg Thr His
 1 5 10 15
 Ala Val Ser Val Ser Glu Thr Asp Asp Tyr Ala Glu Ile Ile Asp Glu
 20 25 30
 Glu Asp Thr Tyr Thr Met Pro Ser Thr Arg Asp Tyr Glu Ile Gln Arg
 35 40 45
 Glu Arg Ile Glu Leu Gly Arg Cys Ile Gly Glu Gly Gln Phe Gly Asp
 50 55 60
 Val His Gln Gly Ile Tyr Met Ser Pro Glu Asn Pro Ala Leu Ala Val
 65 70 75 80
 Ala Ile Lys Thr Cys Lys Asn Cys Thr Ser Asp Ser Val Arg Glu Lys
 85 90 95
 Phe Leu Gln Glu Ala Leu Thr Met Arg Gln Phe Asp His Pro His Ile
 100 105 110
 Val Lys Leu Ile Gly Val Ile Thr Glu Asn Pro Val Trp Ile Ile Met
 115 120 125
 Glu Leu Cys Thr Leu Gly Glu Leu Arg Ser Phe Leu Gln Val Arg Lys
 130 135 140

Tyr Ser Leu Asp Leu Ala Ser Leu Ile Leu Tyr Ala Tyr Gln Leu Ser
 145 150 155 160
 Thr Ala Leu Ala Tyr Leu Glu Ser Lys Arg Phe Val His Arg Asp Ile
 165 170 175
 Ala Ala Arg Asn Val Leu Val Ser Ser Asn Asp Cys Val Lys Leu Gly
 180 185 190
 Asp Phe Gly Leu Ser Arg Tyr Met Glu Asp Ser Thr Tyr Tyr Lys Ala
 195 200 205
 Ser Lys Gly Lys Leu Pro Ile Lys Trp Met Ala Pro Glu Ser Ile Asn
 210 215 220
 Phe Arg Arg Phe Thr Ser Ala Ser Asp Val Trp Met Phe Gly Val Cys
 225 230 235 240
 Met Trp Glu Ile Leu Met His Gly Val Lys Pro Phe Gln Gly Val Lys
 245 250 255
 Asn Asn Asp Val Ile Gly Arg Ile Glu Asn Gly Glu Arg Leu Pro Met
 260 265 270
 Pro Pro Asn Cys Pro Pro Thr Leu Tyr Ser Leu Met Thr Lys Cys Trp
 275 280 285
 Ala Tyr Asp Pro Ser Arg Arg Pro Arg Phe Thr Glu Leu Lys Ala Gln
 290 295 300
 Leu Ser Thr Ile Leu Glu Glu Glu Lys Ala Gln Gln Glu Glu Arg Met
 305 310 315 320
 Arg Met Glu Ser Arg Arg Gln Ala Thr Val Ser Trp Asp Ser Gly Gly
 325 330 335
 Ser Asp Glu Ala Pro Pro Lys Pro Ser Arg Pro Gly Tyr Pro Ser Pro
 340 345 350
 Arg Ser Ser Glu Gly
 355

<210> 93
 <211> 354
 <212> PRT
 <213> Homo sapiens

<400> 93
 Pro Pro Pro Gln Asn Ser Val Pro His Tyr Ala Glu Ala Asp Ile Val
 1 5 10 15
 Thr Leu Gln Gly Val Thr Gly Gly Asn Thr Tyr Ala Val Pro Ala Leu
 20 25 30
 Pro Pro Gly Ala Val Gly Asp Gly Pro Pro Arg Val Asp Phe Pro Arg
 35 40 45

Ser Arg Leu Arg Phe Lys Glu Lys Leu Gly Glu Gly Gln Phe Gly Glu
 50 55 60

Val His Leu Cys Glu Val Asp Ser Pro Gln Asp Leu Val Ser Leu Asp
 65 70 75 80

Phe Pro Leu Asn Val Arg Lys Gly His Pro Leu Leu Val Ala Val Lys
 85 90 95

Ile Leu Arg Pro Asp Ala Thr Lys Asn Ala Arg Asn Asp Phe Leu Lys
 100 105 110

Glu Val Lys Ile Met Ser Arg Leu Lys Asp Pro Asn Ile Ile Arg Leu
 115 120 125

Leu Gly Val Cys Val Gln Asp Asp Pro Leu Cys Met Ile Thr Asp Tyr
 130 135 140

Met Glu Asn Gly Asp Leu Asn Gln Phe Leu Ser Ala His Gln Leu Glu
 145 150 155 160

Asp Lys Ala Ala Glu Gly Ala Pro Gly Asp Gly Gln Ala Ala Gln Gly
 165 170 175

Pro Thr Ile Ser Tyr Pro Met Leu Leu His Val Ala Ala Gln Ile Ala
 180 185 190

Ser Gly Met Arg Tyr Leu Ala Thr Leu Asn Phe Val His Arg Asp Leu
 195 200 205

Ala Thr Arg Asn Cys Leu Val Gly Glu Asn Phe Thr Ile Lys Ile Ala
 210 215 220

Asp Phe Gly Met Ser Arg Asn Leu Tyr Ala Gly Asp Tyr Tyr Arg Val
 225 230 235 240

Gln Gly Arg Ala Val Leu Pro Ile Arg Trp Met Ala Trp Glu Cys Ile
 245 250 255

Leu Met Gly Lys Phe Thr Thr Ala Ser Asp Val Trp Ala Phe Gly Val
 260 265 270

Thr Leu Trp Glu Val Leu Met Leu Cys Arg Ala Gln Pro Phe Gly Gln
 275 280 285

Leu Thr Asp Glu Gln Val Ile Glu Asn Ala Gly Glu Phe Phe Arg Asp
 290 295 300

Gln Gly Arg Gln Val Tyr Leu Ser Arg Pro Pro Ala Cys Pro Gln Gly
 305 310 315 320

Leu Tyr Glu Leu Met Leu Arg Cys Trp Ser Arg Glu Ser Glu Gln Arg
 325 330 335

Pro Pro Phe Ser Gln Leu His Arg Phe Leu Ala Glu Asp Ala Leu Asn
 340 345 350

Thr Val

```

<210> 94
<211> 325
<212> PRT
<213> Homo sapiens

<400> 94
Met Glu Cys Leu Asn Gly Gly Pro Leu Gln Asn Gly Gln Pro Ser Ala
1 5 10 15

Glu Ile Gln Glu Glu Val Ala Leu Thr Ser Leu Gly Ser Gly Pro Ala
20 25 30

Ala Thr Asn Lys Arg His Ser Thr Ser Asp Lys Met His Phe Pro Arg
35 40 45

Ser Ser Leu Gln Pro Ile Thr Thr Leu Gly Lys Ser Glu Phe Gly Glu
50 55 60

Val Phe Leu Ala Lys Ala Gln Gly Leu Glu Glu Gly Val Ala Glu Thr
65 70 75 80

Leu Val Leu Val Lys Ser Leu Gln Ser Lys Asp Glu Gln Gln Leu
85 90 95

Asp Phe Arg Arg Glu Leu Glu Met Phe Gly Lys Leu Asn His Ala Asn
100 105 110

Val Val Arg Leu Leu Gly Leu Cys Arg Glu Ala Glu Pro His Tyr Met
115 120 125

Val Leu Glu Tyr Val Asp Leu Gly Asp Leu Lys Gln Phe Leu Arg Ile
130 135 140

Ser Lys Ser Lys Asp Glu Lys Leu Lys Ser Gln Pro Leu Ser Thr Lys
145 150 155 160

Gln Lys Val Ala Leu Cys Thr Gln Val Ala Leu Gly Met Glu His Leu
165 170 175

Ser Asn Asn Arg Phe Val His Lys Asp Leu Ala Ala Arg Asn Cys Leu
180 185 190

Val Ser Ala Gln Arg Gln Val Lys Val Ser Ala Leu Gly Leu Ser Lys
195 200 205

Asp Val Tyr Asn Ser Glu Tyr Tyr His Phe Arg Gln Ala Trp Val Pro
210 215 220

Leu Arg Trp Met Ser Pro Glu Ala Ile Leu Glu Gly Asp Phe Ser Thr
225 230 235 240

Lys Ser Asp Val Trp Ala Phe Gly Val Leu Met Trp Glu Val Phe Thr
245 250 255

```

His Gly Glu Met Pro His Gly Gly Gln Ala Asp Asp Glu Val Leu Ala
 260 265 270

Asp Leu Gln Ala Gly Lys Ala Arg Leu Pro Gln Pro Glu Gly Cys Pro
 275 280 285

Ser Lys Leu Tyr Arg Leu Met Gln Arg Cys Trp Ala Leu Ser Pro Lys
 290 295 300

Asp Arg Pro Ser Phe Ser Glu Ile Ala Ser Ala Leu Gly Asp Ser Thr
 305 310 315 320

Val Asp Ser Lys Pro
 325

<210> 95

<211> 324

<212> PRT

<213> Homo sapiens

<400> 95

Ser Gln Leu Gly Leu Asn Lys Asp Pro Leu Glu Glu Met Ala His Leu
 1 5 10 15

Gly Asn Tyr Asp Ser Gly Thr Ala Glu Thr Pro Glu Thr Asp Glu Ser
 20 25 30

Val Ser Ser Ser Asn Ala Ser Leu Lys Leu Arg Arg Lys Pro Arg Glu
 35 40 45

Ser Asp Phe Glu Thr Ile Lys Leu Ile Ser Asn Gly Ala Tyr Gly Ala
 50 55 60

Val Tyr Phe Val Arg His Lys Glu Ser Arg Gln Arg Phe Ala Met Lys
 65 70 75 80

Lys Ile Asn Lys Gln Asn Leu Ile Leu Arg Asn Gln Ile Gln Gln Ala
 85 90 95

Phe Val Glu Arg Asp Ile Leu Thr Phe Ala Glu Asn Pro Phe Val Val
 100 105 110

Ser Met Tyr Cys Ser Phe Glu Thr Arg Arg His Leu Cys Met Val Met
 115 120 125

Glu Tyr Val Glu Gly Gly Asp Cys Ala Thr Leu Met Lys Asn Met Gly
 130 135 140

Pro Leu Pro Val Asp Met Ala Arg Met Tyr Phe Ala Glu Thr Val Leu
 145 150 155 160

Ala Leu Glu Tyr Leu His Asn Tyr Gly Ile Val His Arg Asp Leu Lys
 165 170 175

Pro Asp Asn Leu Leu Val Thr Ser Met Gly His Ile Lys Leu Thr Asp
 180 185 190

Phe Gly Leu Ser Lys Val Gly Leu Met Ser Met Thr Thr Asn Leu Tyr
 195 200 205
 Glu Gly His Ile Glu Lys Asp Ala Arg Glu Phe Leu Asp Lys Gln Val
 210 215 220
 Cys Gly Thr Pro Glu Tyr Ile Ala Pro Glu Val Ile Leu Arg Gln Gly
 225 230 235 240
 Tyr Gly Lys Pro Val Asp Trp Trp Ala Met Gly Ile Ile Leu Tyr Glu
 245 250 255
 Phe Leu Val Gly Cys Val Pro Phe Phe Gly Asp Thr Pro Glu Glu Leu
 260 265 270
 Phe Gly Gln Val Ile Ser Asp Glu Ile Asn Trp Pro Glu Lys Asp Glu
 275 280 285
 Ala Pro Pro Pro Asp Ala Gln Asp Leu Ile Thr Leu Leu Leu Arg Gln
 290 295 300
 Asn Pro Leu Glu Arg Leu Gly Thr Gly Ala Tyr Glu Val Lys Gln
 305 310 315 320
 His Arg Phe Phe

<210> 96
 <211> 374
 <212> PRT
 <213> Homo sapiens

<400> 96
 Ile Val Ser Gln Leu Gly Leu Thr Arg Asp Pro Leu Glu Glu Met Ala
 1 5 10 15
 Gln Leu Ser Ser Cys Asp Ser Pro Asp Thr Pro Glu Thr Asp Asp Ser
 20 25 30
 Ile Glu Gly His Gly Ala Ser Leu Pro Ser Lys Lys Thr Pro Ser Glu
 35 40 45
 Glu Asp Phe Glu Thr Ile Lys Leu Ile Ser Asn Gly Ala Tyr Gly Ala
 50 55 60
 Val Phe Leu Val Arg His Lys Ser Thr Arg Gln Arg Phe Ala Met Lys
 65 70 75 80
 Lys Ile Asn Lys Gln Asn Leu Ile Leu Arg Asn Gln Ile Gln Gln Ala
 85 90 95
 Phe Val Glu Arg Asp Ile Leu Thr Phe Ala Glu Asn Pro Phe Val Val
 100 105 110
 Ser Met Phe Cys Ser Phe Asp Thr Lys Arg His Leu Cys Met Val Met
 115 120 125

Glu Tyr Val Glu Gly Gly Asp Cys Ala Thr Leu Leu Lys Asn Ile Gly
 130 135 140
 Ala Leu Pro Val Asp Met Val Arg Leu Tyr Phe Ala Glu Thr Val Leu
 145 150 155 160
 Ala Leu Glu Tyr Leu His Asn Tyr Gly Ile Val His Arg Asp Leu Lys
 165 170 175
 Pro Asp Asn Leu Leu Ile Thr Ser Met Gly His Ile Lys Leu Thr Asp
 180 185 190
 Phe Gly Leu Ser Lys Met Gly Leu Met Ser Leu Thr Thr Asn Leu Tyr
 195 200 205
 Glu Gly His Ile Glu Lys Asp Ala Arg Glu Phe Leu Asp Lys Gln Val
 210 215 220
 Cys Gly Thr Pro Glu Tyr Ile Ala Pro Glu Val Ile Leu Arg Gln Gly
 225 230 235 240
 Tyr Gly Lys Pro Val Asp Trp Trp Ala Met Gly Ile Ile Leu Tyr Glu
 245 250 255
 Phe Leu Val Gly Cys Val Pro Phe Phe Gly Asp Thr Pro Glu Glu Leu
 260 265 270
 Phe Gly Gln Val Ile Ser Asp Glu Ile Val Trp Pro Glu Gly Asp Glu
 275 280 285
 Ala Leu Pro Pro Asp Ala Gln Asp Leu Thr Ser Lys Leu Leu His Gln
 290 295 300
 Asn Pro Leu Glu Arg Leu Gly Thr Gly Ser Ala Tyr Glu Val Lys Gln
 305 310 315 320
 His Pro Phe Phe Thr Gly Leu Asp Trp Thr Gly Leu Leu Arg Gln Lys
 325 330 335
 Ala Glu Phe Ile Pro Gln Leu Glu Ser Glu Asp Asp Thr Ser Tyr Phe
 340 345 350
 Asp Thr Arg Ser Glu Arg Tyr His His Met Asp Ser Glu Asp Glu Glu
 355 360 365
 Glu Val Ser Glu Asp Gly
 370
 <210> 97
 <211> 338
 <212> PRT
 <213> Homo sapiens
 <400> 97
 Met Met Glu Lys Tyr Glu Lys Ile Gly Lys Ile Gly Glu Gly Ser Tyr
 1 5 10 15

120

Gly Val Val Phe Lys Cys Arg Asn Arg Asp Thr Gly Gln Ile Val Ala
20 25 30

Ile Lys Lys Phe Leu Glu Ser Glu Asp Asp Pro Val Ile Lys Lys Ile
35 40 45

Ala Leu Arg Glu Ile Arg Met Leu Lys Gln Leu Lys His Pro Asn Leu
50 55 60

Val Asn Leu Leu Glu Val Phe Arg Arg Lys Arg Arg Leu His Leu Val
65 70 75 80

Phe Glu Tyr Cys Asp His Thr Val Leu His Glu Leu Asp Arg Tyr Gln
85 90 95

Arg Gly Val Pro Glu His Leu Val Lys Ser Ile Thr Trp Gln Thr Leu
100 105 110

Gln Ala Val Asn Phe Cys His Lys His Asn Cys Ile His Arg Asp Val
115 120 125

Lys Pro Glu Asn Ile Leu Ile Thr Lys His Ser Val Ile Lys Leu Cys
130 135 140

Asp Phe Gly Phe Ala Arg Leu Leu Thr Gly Pro Ser Asp Tyr Tyr Thr
145 150 155 160

Asp Tyr Val Ala Thr Arg Trp Tyr Arg Ser Pro Glu Leu Leu Val Gly
165 170 175

Asp Thr Gln Tyr Gly Pro Pro Val Asp Val Trp Ala Ile Gly Cys Val
180 185 190

Phe Ala Glu Leu Leu Ser Gly Val Pro Leu Trp Pro Gly Lys Ser Asp
195 200 205

Val Asp Gln Leu Tyr Leu Ile Arg Lys Thr Leu Gly Asp Leu Ile Pro
210 215 220

Arg His Gln Gln Val Phe Ser Thr Asn Gln Tyr Phe Ser Gly Val Lys
225 230 235 240

Ile Pro Asp Pro Glu Asp Met Glu Pro Leu Glu Leu Lys Phe Pro Asn
245 250 255

Ile Ser Tyr Pro Ala Leu Gly Leu Leu Lys Gly Cys Leu His Met Asp
260 265 270

Pro Thr Gln Arg Leu Thr Cys Glu Gln Leu Leu His His Pro Tyr Phe
275 280 285

Glu Asn Ile Arg Glu Ile Glu Asp Leu Ala Lys Glu His Asn Lys Pro
290 295 300

Thr Arg Lys Thr Leu Arg Lys Ser Arg Lys His His Cys Phe Thr Glu
305 310 315 320

Thr Ser Lys Leu Gln Tyr Leu Pro Gln Leu Thr Gly Ser Ser Ile Leu
325 330 335

Pro Ala

<210> 98
<211> 391
<212> PRT
<213> *Homo sapiens*

<400> 98
Pro Gly Gln Gln Gln Pro Tyr Phe Pro Ser Pro Ala Pro Gly Gln Ala
1 5 10 15

Pro Gly Pro Ala Ala Ala Ala Pro Ala Gln Val Gln Ala Ala Ala Ala
20 25 30

Ala Thr Val Lys Ala His His His Gln His Ser His His His Pro Gln Gln
35 40 45

Gln Leu Asp Ile Glu Pro Asp Arg Pro Ile Gly Tyr Gly Ala Phe Gly
50 55 60

Val Val Trp Ser Val Thr Asp Pro Arg Asp Gly Lys Arg Val Ala Leu
65 70 75 80

Lys Lys Met Pro Asn Val Phe Gln Asn Leu Val Ser Cys Lys Arg Val
85 90 95

Phe Arg Glu Leu Lys Met Leu Cys Phe Phe Lys His Asp Asn Val Leu
100 105 110

Ser Ala Leu Asp Ile Leu Gln Pro Pro His Ile Asp Tyr Phe Glu Glu
115 120 125

Ile	Tyr	Val	Val	Thr	Glu	Leu	Met	Gln	Ser	Asp	Leu	His	Lys	Ile	Ile
130					135							140			

Val Ser Pro Gln Pro Leu Ser Ser Asp His Val Lys Val Phe Leu Tyr
145 150 155 160

Gln Ile Leu Arg Gly Leu Lys Tyr Leu His Ser Ala Gly Ile Leu His
165 170 175

Arg Asp Ile Lys Pro Gly Asn Leu Leu Val Asn Ser Asn Cys Val Leu
180 185 190

Lys Ile Cys Asp Phe Gly Leu Ala Arg Val Glu Glu Leu Asp Glu Ser
 195 200 205

Arg His Met Thr Gln Glu Val Val Thr Gln Tyr Tyr Arg Ala Pro Glu
210 215 220

Ile Leu Met Gly Ser Arg His Tyr Ser Asn Ala Ile Asp Ile Ile Ser
225 230 235 240

Val Gly Cys Ile Phe Ala Glu Leu Leu Gly Arg Arg Ile Leu Phe Gln
 245 250 255
 Ala Gln Ser Pro Ile Gln Gln Leu Asp Leu Ile Thr Asp Leu Leu Gly
 260 265 270
 Thr Pro Ser Leu Glu Ala Met Arg Thr Ala Cys Glu Gly Ala Lys Ala
 275 280 285
 His Ile Leu Arg Gly Pro His Lys Gln Pro Ser Leu Pro Val Leu Tyr
 290 295 300
 Thr Leu Ser Ser Gln Ala Thr His Glu Ala Val His Leu Leu Cys Arg
 305 310 315 320
 Met Leu Val Phe Asp Pro Ser Lys Arg Ile Ser Ala Lys Asp Ala Leu
 325 330 335
 Ala His Pro Tyr Leu Asp Glu Gly Arg Leu Arg Tyr His Thr Cys Met
 340 345 350
 Cys Lys Cys Cys Phe Ser Thr Ser Thr Gly Arg Val Tyr Thr Ser Asp
 355 360 365
 Phe Glu Pro Val Thr Asn Pro Lys Phe Asp Asp Thr Phe Glu Lys Asn
 370 375 380
 Leu Ser Ser Val Arg Gln Val
 385 390

 <210> 99
 <211> 315
 <212> PRT
 <213> Homo sapiens

 <400> 99
 Met Ser Lys Val Phe Ser Gly Lys Arg Leu Glu Ala Glu Phe Pro Pro
 1 5 10 15
 His His Ser Gln Ser Thr Phe Arg Lys Thr Ser Pro Ala Pro Gly Gly
 20 25 30
 Pro Ala Gly Glu Gly Pro Leu Gln Ser Leu Thr Cys Leu Ile Gly Glu
 35 40 45
 Lys Asp Leu Arg Leu Leu Glu Lys Leu Gly Asp Gly Ser Phe Gly Val
 50 55 60
 Val Arg Arg Gly Glu Trp Asp Ala Pro Ser Gly Lys Thr Val Ser Val
 65 70 75 80
 Ala Val Lys Cys Leu Lys Pro Asp Val Leu Ser Gln Pro Glu Ala Met
 85 90 95
 Asp Asp Phe Ile Arg Glu Val Asn Ala Met His Ser Leu Asp His Arg
 100 105 110

Asn Leu Ile Arg Leu Tyr Gly Val Val Leu Thr Pro Pro Met Lys Met
 115 120 125

Val Thr Glu Leu Ala Pro Leu Gly Ser Leu Leu Asp Arg Leu Arg Lys
 130 135 140

His Gln Gly His Phe Leu Leu Gly Thr Leu Ser Arg Tyr Ala Val Gln
 145 150 155 160

Val Ala Glu Gly Met Gly Tyr Leu Glu Ser Lys Arg Phe Ile His Arg
 165 170 175

Asp Leu Ala Ala Arg Asn Leu Leu Ala Thr Arg Asp Leu Val Lys
 180 185 190

Ile Gly Asp Phe Gly Leu Met Arg Ala Leu Pro Gln Asn Asp Asp His
 195 200 205

Tyr Val Met Gln Glu His Arg Lys Val Pro Phe Ala Trp Cys Ala Pro
 210 215 220

Glu Ser Leu Lys Thr Arg Thr Phe Ser His Ala Ser Asp Thr Trp Met
 225 230 235 240

Phe Gly Val Thr Leu Trp Glu Met Phe Thr Tyr Gly Gln Glu Pro Trp
 245 250 255

Ile Gly Leu Asn Gly Ser Gln Ile Leu His Lys Ile Asp Lys Glu Gly
 260 265 270

Glu Arg Leu Pro Arg Pro Glu Asp Cys Pro Gln Asp Ile Tyr Asn Val
 275 280 285

Met Val Gln Cys Trp Ala His Lys Pro Glu Asp Arg Pro Thr Phe Val
 290 295 300

Ala Leu Arg Asp Phe Leu Leu Glu Ala Gln Pro
 305 310 315

<210> 100

<211> 359

<212> PRT

<213> Homo sapiens

<400> 100

Leu Gly Ile Gly Leu Phe Met Arg Arg Arg His Ile Val Arg Lys Arg
 1 5 10 15

Thr Leu Arg Arg Leu Leu Gln Glu Arg Glu Leu Val Glu Pro Leu Thr
 20 25 30

Pro Ser Gly Glu Ala Pro Asn Gln Ala Leu Leu Arg Ile Leu Lys Glu
 35 40 45

Thr Glu Phe Lys Lys Ile Lys Val Leu Gly Ser Gly Ala Phe Gly Thr
 50 55 60

Val Tyr Lys Gly Leu Trp Ile Pro Glu Gly Glu Lys Val Lys Ile Pro
 65 70 75 80
 Val Ala Ile Lys Glu Leu Arg Glu Ala Thr Ser Pro Lys Ala Asn Lys
 85 90 95
 Glu Ile Leu Asp Glu Ala Tyr Val Met Ala Ser Val Asp Asn Pro His
 100 105 110
 Val Cys Arg Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Ile
 115 120 125
 Thr Gln Leu Met Pro Phe Gly Cys Leu Leu Asp Tyr Val Arg Glu His
 130 135 140
 Lys Asp Asn Ile Gly Ser Gln Tyr Leu Leu Asn Trp Cys Val Gln Ile
 145 150 155 160
 Ala Lys Gly Met Asn Tyr Leu Glu Asp Arg Arg Leu Val His Arg Asp
 165 170 175
 Leu Ala Ala Arg Asn Val Leu Val Lys Thr Pro Gln His Val Lys Ile
 180 185 190
 Thr Asp Phe Gly Leu Ala Lys Leu Leu Gly Ala Glu Glu Lys Glu Tyr
 195 200 205
 His Ala Glu Gly Gly Lys Val Pro Ile Lys Trp Met Ala Leu Glu Ser
 210 215 220
 Ile Leu His Arg Ile Tyr Thr His Gln Ser Asp Val Trp Ser Tyr Gly
 225 230 235 240
 Val Thr Val Trp Glu Leu Met Thr Phe Gly Ser Lys Pro Tyr Asp Gly
 245 250 255
 Ile Pro Ala Ser Glu Ile Ser Ser Ile Leu Glu Lys Gly Glu Arg Leu
 260 265 270
 Pro Gln Pro Pro Ile Cys Thr Ile Asp Val Tyr Met Ile Met Val Lys
 275 280 285
 Cys Trp Met Ile Asp Ala Asp Ser Arg Pro Lys Phe Arg Glu Leu Ile
 290 295 300
 Ile Glu Phe Ser Lys Met Ala Arg Asp Pro Gln Arg Tyr Leu Val Ile
 305 310 315 320
 Gln Gly Asp Glu Arg Met His Leu Pro Ser Pro Thr Asp Ser Asn Phe
 325 330 335
 Tyr Arg Ala Leu Met Asp Glu Glu Asp Met Asp Asp Val Val Asp Ala
 340 345 350
 Asp Glu Tyr Leu Ile Pro Gln
 355

<210> 101

<211> 370

<212> PRT

<213> Homo sapiens

<400> 101

Glu	Pro	Thr	Val	Glu	Arg	Gly	Glu	Leu	Val	Val	Arg	Tyr	Arg	Val	Arg
1				5					10					15	

Lys	Ser	Tyr	Ser	Arg	Arg	Thr	Thr	Glu	Ala	Thr	Leu	Asn	Ser	Leu	Gly
			20					25				30			

Ile	Ser	Glu	Glu	Leu	Lys	Glu	Lys	Leu	Arg	Asp	Val	Met	Val	Asp	Arg
					35			40				45			

His	Lys	Val	Ala	Leu	Gly	Lys	Thr	Leu	Gly	Glu	Gly	Glu	Phe	Gly	Ala
					50			55			60				

Val	Met	Glu	Gly	Gln	Leu	Asn	Gln	Asp	Asp	Ser	Ile	Leu	Lys	Val	Ala
	65				70					75			80		

Val	Lys	Thr	Met	Lys	Ile	Ala	Ile	Cys	Thr	Arg	Ser	Glu	Leu	Glu	Asp
					85				90				95		

Phe	Leu	Ser	Glu	Ala	Val	Cys	Met	Lys	Glu	Phe	Asp	His	Pro	Asn	Val
					100			105				110			

Met	Arg	Leu	Ile	Gly	Val	Cys	Phe	Gln	Gly	Ser	Glu	Arg	Glu	Ser	Phe
						115		120				125			

Pro	Ala	Pro	Val	Val	Ile	Leu	Pro	Phe	Met	Lys	His	Gly	Asp	Leu	His
					130			135			140				

Ser	Phe	Leu	Leu	Tyr	Ser	Arg	Leu	Gly	Asp	Gln	Pro	Val	Tyr	Leu	Pro
						145		150			155			160	

Thr	Gln	Met	Leu	Val	Lys	Phe	Met	Ala	Asp	Ile	Ala	Ser	Gly	Met	Glu
					165				170			175			

Tyr	Leu	Ser	Thr	Lys	Arg	Phe	Ile	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn
					180			185			190				

Cys	Met	Leu	Asn	Glu	Asn	Met	Ser	Val	Cys	Val	Ala	Asp	Phe	Gly	Leu
						195		200			205				

Ser	Lys	Lys	Ile	Tyr	Asn	Gly	Asp	Tyr	Tyr	Arg	Gln	Gly	Arg	Ile	Ala
					210			215			220				

Lys	Met	Pro	Val	Lys	Trp	Ile	Ala	Ile	Glu	Ser	Leu	Ala	Asp	Arg	Val
					225			230			235			240	

Tyr	Thr	Ser	Lys	Ser	Asp	Val	Trp	Ser	Phe	Gly	Val	Thr	Met	Trp	Glu
					245			250			255				

Ile	Ala	Thr	Arg	Gly	Gln	Thr	Pro	Tyr	Pro	Gly	Val	Glu	Asn	Ser	Glu
					260			265			270				

Ile Tyr Asp Tyr Leu Arg Gln Gly Asn Arg Leu Lys Gln Pro Ala Asp
 275 280 285

Cys Leu Asp Gly Leu Tyr Ala Leu Met Ser Arg Cys Trp Glu Leu Asn
 290 295 300

Pro Gln Asp Arg Pro Ser Phe Thr Glu Leu Arg Glu Asp Leu Glu Asn
 305 310 320

Thr Leu Lys Ala Leu Pro Pro Ala Gln Glu Pro Asp Glu Ile Leu Tyr
 325 330 335

Val Asn Met Asp Glu Gly Gly Tyr Pro Glu Pro Pro Gly Ala Ala
 340 345 350

Gly Gly Ala Asp Pro Pro Thr Gln Pro Asp Pro Lys Asp Ser Cys Ser
 355 360 365

Cys Leu
 370

<210> 102
<211> 362
<212> PRT
<213> Homo sapiens

<400> 102
Leu Thr Asp Met Ser Pro Ile Leu Thr Ser Gly Asp Ser Asp Ile Ser
 1 5 10 15

Ser Pro Leu Leu Gln Asn Thr Val His Ile Asp Leu Ser Ala Leu Asn
 20 25 30

Pro Glu Leu Val Gln Ala Val Gln His Val Val Ile Gly Pro Ser Ser
 35 40 45

Leu Ile Val His Phe Asn Glu Val Ile Gly Arg Gly His Phe Gly Cys
 50 55 60

Val Tyr His Gly Thr Leu Leu Asp Asn Asp Gly Lys Ile His Cys
 65 70 75 80

Ala Val Lys Ser Leu Asn Arg Ile Thr Asp Ile Gly Glu Val Ser Gln
 85 90 95

Phe Leu Thr Glu Gly Ile Ile Met Lys Asp Phe Ser His Pro Asn Val
 100 105 110

Leu Ser Leu Leu Gly Ile Cys Leu Arg Ser Glu Gly Ser Pro Leu Val
 115 120 125

Val Leu Pro Tyr Met Lys His Gly Asp Leu Arg Asn Phe Ile Arg Asn
 130 135 140

Glu Thr His Asn Pro Thr Val Lys Asp Leu Ile Gly Phe Gly Leu Gln
 145 150 155 160

Val Ala Lys Ala Met Lys Tyr Leu Ala Ser Lys Lys Phe Val His Arg
 165 170 175

 Asp Leu Ala Ala Arg Asn Cys Met Leu Asp Glu Lys Phe Thr Val Lys
 180 185 190

 Val Ala Asp Phe Gly Leu Ala Arg Asp Met Tyr Asp Lys Glu Tyr Tyr
 195 200 205

 Ser Val His Asn Lys Thr Gly Ala Lys Leu Pro Val Lys Trp Met Ala
 210 215 220

 Leu Glu Ser Leu Gln Thr Gln Lys Phe Thr Thr Lys Ser Asp Val Trp
 225 230 235 240

 Ser Phe Gly Val Val Leu Trp Glu Leu Met Thr Arg Gly Ala Pro Pro
 245 250 255

 Tyr Pro Asp Val Asn Thr Phe Asp Ile Thr Val Tyr Leu Leu Gln Gly
 260 265 270

 Arg Arg Leu Leu Gln Pro Glu Tyr Cys Pro Asp Pro Leu Tyr Glu Val
 275 280 285

 Met Leu Lys Cys Trp His Pro Lys Ala Glu Met Arg Pro Ser Phe Ser
 290 295 300

 Glu Leu Val Ser Arg Ile Ser Ala Ile Phe Ser Thr Phe Ile Gly Glu
 305 310 315 320

 His Tyr Val His Val Asn Ala Thr Tyr Val Asn Val Lys Cys Val Ala
 325 330 335

 Pro Tyr Pro Ser Leu Leu Ser Ser Glu Asp Asn Ala Asp Asp Glu Val
 340 345 350

 Asp Thr Arg Pro Ala Ser Phe Trp Glu Thr
 355 360

 <210> 103
 <211> 315
 <212> PRT
 <213> Homo sapiens

 <400> 103
 Asn Pro Tyr Glu Pro Glu Leu Ala Pro Trp Ala Ala Asp Lys Gly Pro
 1 5 10 15

 Gln Arg Glu Ala Leu Pro Met Asp Thr Glu Val Tyr Glu Ser Pro Tyr
 20 25 30

 Ala Asp Pro Glu Glu Ile Arg Pro Lys Glu Val Tyr Leu Asp Arg Lys
 35 40 45

 Leu Leu Thr Leu Glu Asp Lys Glu Leu Gly Ser Gly Asn Phe Gly Thr
 50 55 60

Val Lys Lys Gly Tyr Tyr Gln Met Lys Lys Val Val Lys Thr Val Ala
 65 70 75 80
 Val Lys Ile Leu Lys Asn Glu Ala Asn Asp Pro Ala Leu Lys Asp Glu
 85 90 95
 Leu Leu Ala Glu Ala Asn Val Met Gln Gln Leu Asp Asn Pro Tyr Ile
 100 105 110
 Val Arg Met Ile Gly Ile Cys Glu Ala Glu Ser Trp Met Leu Val Met
 115 120 125
 Glu Met Ala Glu Leu Gly Pro Leu Asn Lys Tyr Leu Gln Gln Asn Arg
 130 135 140
 His Val Lys Asp Lys Asn Ile Ile Glu Leu Val His Gln Val Ser Met
 145 150 155 160
 Gly Met Lys Tyr Leu Glu Glu Ser Asn Phe Val His Arg Asp Leu Ala
 165 170 175
 Ala Arg Asn Val Leu Leu Val Thr Gln His Tyr Ala Lys Ile Ser Asp
 180 185 190
 Phe Gly Leu Ser Lys Ala Leu Arg Ala Asp Glu Asn Tyr Tyr Lys Ala
 195 200 205
 Gln Thr His Gly Lys Trp Pro Val Lys Trp Tyr Ala Pro Glu Cys Ile
 210 215 220
 Asn Tyr Tyr Lys Phe Ser Ser Lys Ser Asp Val Trp Ser Phe Gly Val
 225 230 235 240
 Leu Met Trp Glu Ala Phe Ser Tyr Gly Gln Lys Pro Tyr Arg Gly Met
 245 250 255
 Lys Gly Ser Glu Val Thr Ala Met Leu Glu Lys Gly Glu Arg Met Gly
 260 265 270
 Cys Pro Ala Gly Cys Pro Arg Glu Met Tyr Asp Leu Met Asn Leu Cys
 275 280 285
 Trp Thr Tyr Asp Val Glu Asn Arg Pro Gly Phe Ala Ala Val Glu Leu
 290 295 300
 Arg Leu Arg Asn Tyr Tyr Asp Val Val Asn
 305 310 315

 <210> 104
 <211> 309
 <212> PRT
 <213> Homo sapiens

 <400> 104
 Asn Lys Leu Glu Glu Gln Asn Pro Asp Ile Val Ser Arg Lys Lys Asn
 1 5 10 15

Gln Pro Thr Glu Val Asp Pro Thr His Phe Glu Lys Arg Phe Leu Lys
 20 25 30

Arg Ile Arg Asp Leu Gly Glu Gly His Phe Gly Lys Val Glu Leu Cys
 35 40 45

Arg Tyr Asp Pro Glu Asp Asn Thr Gly Glu Gln Val Ala Val Lys Ser
 50 55 60

Leu Lys Pro Glu Ser Gly Gly Asn His Ile Ala Asp Leu Lys Lys Glu
 65 70 75 80

Ile Glu Ile Leu Arg Asn Leu Tyr His Glu Asn Ile Val Lys Tyr Lys
 85 90 95

Gly Ile Cys Thr Glu Asp Gly Gly Asn Gly Ile Lys Leu Ile Met Glu
 100 105 110

Phe Leu Pro Ser Gly Ser Leu Lys Glu Tyr Leu Pro Lys Asn Lys Asn
 115 120 125

Lys Ile Asn Leu Lys Gln Gln Leu Lys Tyr Ala Val Gln Ile Cys Lys
 130 135 140

Gly Met Asp Tyr Leu Gly Ser Arg Gln Tyr Val His Arg Asp Leu Ala
 145 150 155 160

Ala Arg Asn Val Leu Val Glu Ser Glu His Gln Val Lys Ile Gly Asp
 165 170 175

Phe Gly Leu Thr Lys Ala Ile Glu Thr Asp Lys Glu Tyr Tyr Thr Val
 180 185 190

Lys Asp Asp Arg Asp Ser Pro Val Phe Trp Tyr Ala Pro Glu Cys Leu
 195 200 205

Met Gln Ser Lys Phe Tyr Ile Ala Ser Asp Val Trp Ser Phe Gly Val
 210 215 220

Thr Leu His Glu Leu Leu Thr Tyr Cys Asp Ser Asp Ser Ser Pro Met
 225 230 235 240

Ala Leu Phe Leu Lys Met Ile Gly Pro Thr His Gly Gln Met Thr Val
 245 250 255

Thr Arg Leu Val Asn Thr Leu Lys Glu Gly Lys Arg Leu Pro Cys Pro
 260 265 270

Pro Asn Cys Pro Asp Glu Val Tyr Gln Leu Met Arg Lys Cys Trp Glu
 275 280 285

Phe Gln Pro Ser Asn Arg Thr Ser Phe Gln Asn Leu Ile Glu Gly Phe
 290 295 300

Glu Ala Leu Leu Lys
 305

<210> 105

<211> 328

<212> PRT

<213> Homo sapiens

<400> 105

Thr	Thr	Gln	Tyr	Leu	Arg	Ala	Asp	Thr	Pro	Asn	Asn	Ala	Thr	Pro	Ile
1				5				10					15		

Thr	Ser	Tyr	Pro	Thr	Leu	Arg	Ile	Glu	Lys	Asn	Asp	Leu	Arg	Ser	Val
				20				25				30			

Thr	Leu	Leu	Glu	Ala	Lys	Gly	Lys	Val	Lys	Asp	Ile	Ala	Ile	Ser	Arg
				35			40				45				

Glu	Arg	Ile	Thr	Leu	Lys	Asp	Val	Leu	Gln	Glu	Gly	Thr	Phe	Gly	Arg
	50				55				60						

Ile	Phe	His	Gly	Ile	Leu	Ile	Asp	Glu	Lys	Asp	Pro	Asn	Lys	Glu	Lys
65					70				75			80			

Gln	Ala	Phe	Val	Lys	Thr	Val	Lys	Asp	Gln	Ala	Ser	Glu	Ile	Gln	Val
				85				90			95				

Thr	Met	Met	Leu	Thr	Glu	Ser	Cys	Lys	Leu	Arg	Gly	Leu	His	His	Arg
				100				105			110				

Asn	Leu	Leu	Pro	Ile	Thr	His	Val	Cys	Ile	Glu	Glu	Gly	Glu	Lys	Pro
	115				120					125					

Met	Val	Ile	Leu	Pro	Tyr	Met	Asn	Trp	Gly	Asn	Leu	Lys	Leu	Phe	Leu
	130				135				140						

Arg	Gln	Cys	Lys	Leu	Val	Glu	Ala	Asn	Asn	Pro	Gln	Ala	Ile	Ser	Gln
145				150				155			160				

Gln	Asp	Leu	Val	His	Met	Ala	Ile	Gln	Ile	Ala	Cys	Gly	Met	Ser	Tyr
				165				170			175				

Leu	Ala	Arg	Arg	Glu	Val	Ile	His	Lys	Asp	Leu	Ala	Ala	Arg	Asn	Cys
				180				185			190				

Val	Ile	Asp	Asp	Thr	Leu	Gln	Val	Lys	Ile	Thr	Asp	Asn	Ala	Leu	Ser
				195			200		205						

Arg	Asp	Leu	Phe	Pro	Met	Asp	Tyr	His	Cys	Leu	Gly	Asp	Asn	Glu	Asn
	210				215				220						

Arg	Pro	Val	Arg	Trp	Met	Ala	Leu	Glu	Ser	Leu	Val	Asn	Asn	Glu	Phe
225					230			235			240				

Ser	Ser	Ala	Ser	Asp	Val	Trp	Ala	Phe	Gly	Val	Thr	Leu	Trp	Glu	Leu
				245				250			255				

Met	Thr	Leu	Gly	Gln	Thr	Pro	Tyr	Val	Asp	Ile	Asp	Pro	Phe	Glu	Met
				260			265			270					

Ala Ala Tyr Leu Lys Asp Gly Tyr Arg Ile Ala Gln Pro Ile Asn Cys
 275 280 285

Pro Asp Glu Leu Phe Ala Val Met Ala Cys Cys Trp Ala Leu Asp Pro
 290 295 300

Glu Glu Arg Pro Lys Phe Gln Gln Leu Val Gln Cys Leu Thr Glu Phe
 305 310 315 320

His Ala Ala Leu Gly Ala Tyr Val
 325

<210> 106
 <211> 361
 <212> PRT
 <213> Homo sapiens

<400> 106
 Gln Thr Glu Ser Ser Thr Pro Pro Gly Ile Pro Gly Gly Ser Arg Gln
 1 5 10 15

Gly Pro Ala Met Asp Gly Thr Ala Ala Glu Pro Arg Pro Gly Ala Gly
 20 25 30

Ser Leu Gln His Ala Gln Pro Pro Pro Gln Pro Arg Lys Lys Arg Pro
 35 40 45

Glu Asp Phe Lys Phe Gly Lys Ile Leu Gly Glu Gly Ser Phe Ser Thr
 50 55 60

Val Val Leu Ala Arg Glu Leu Ala Thr Ser Arg Glu Tyr Ala Ile Lys
 65 70 75 80

Ile Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys Val Pro Tyr Val
 85 90 95

Thr Arg Glu Arg Asp Val Met Ser Arg Leu Asp His Pro Phe Phe Val
 100 105 110

Lys Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys Leu Tyr Phe Gly Leu
 115 120 125

Ser Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr Ile Arg Lys Ile Gly
 130 135 140

Ser Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr Ala Glu Ile Val Ser
 145 150 155 160

Ala Leu Glu Tyr Leu His Gly Lys Gly Ile Ile His Arg Asp Leu Lys
 165 170 175

Pro Glu Asn Ile Leu Leu Asn Glu Asp Met His Ile Gln Ile Thr Asp
 180 185 190

Phe Gly Thr Ala Lys Val Leu Ser Pro Glu Ser Lys Gln Ala Arg Ala
 195 200 205

Asn Ser Phe Val Gly Thr Ala Gln Tyr Val Ser Pro Glu Leu Leu Thr
 210 215 220
 Glu Lys Ser Ala Cys Lys Ser Ser Asp Leu Trp Ala Leu Gly Cys Ile
 225 230 235 240
 Ile Tyr Gln Leu Val Ala Gly Leu Pro Pro Phe Arg Ala Gly Asn Glu
 245 250 255
 Tyr Leu Ile Phe Gln Lys Ile Ile Lys Leu Glu Tyr Asp Phe Pro Glu
 260 265 270
 Lys Phe Phe Pro Lys Ala Arg Asp Leu Val Glu Lys Leu Leu Val Leu
 275 280 285
 Asp Ala Thr Lys Arg Leu Gly Cys Glu Glu Met Glu Gly Tyr Gly Pro
 290 295 300
 Leu Lys Ala His Pro Phe Phe Glu Ser Val Thr Trp Glu Asn Leu His
 305 310 315 320
 Gln Gln Thr Pro Pro Lys Leu Thr Ala Tyr Leu Pro Ala Met Ser Glu
 325 330 335
 Asp Asp Glu Asp Cys Tyr Gly Asn Tyr Asp Asn Leu Leu Ser Gln Phe
 340 345 350
 Gly Cys Met Gln Val Ser Ser Ser Ser
 355 360

<210> 107
 <211> 280
 <212> PRT
 <213> Homo sapiens

<400> 107
 Gln Trp Lys Trp Leu Glu Ala Gln Pro Met Gly Glu Asp Trp Phe Leu
 1 5 10 15
 Asp Phe Arg Val Leu Gly Lys Gly Phe Gly Glu Val Ser Ala Cys
 20 25 30
 Gln Met Lys Ala Thr Gly Lys Leu Tyr Ala Cys Lys Lys Leu Asn Lys
 35 40 45
 Lys Arg Leu Lys Lys Arg Lys Gly Tyr Gln Gly Ala Met Val Glu Lys
 50 55 60
 Lys Ile Leu Met Lys Val His Ser Arg Phe Ile Val Ser Leu Ala Tyr
 65 70 75 80
 Ala Phe Glu Thr Lys Ala Asp Leu Cys Leu Val Met Thr Ile Met Asn
 85 90 95
 Gly Gly Asp Ile Arg Tyr His Ile Tyr Asn Val Asn Glu Glu Asn Pro
 100 105 110

Gly Phe Pro Glu Pro Arg Ala Leu Phe Tyr Thr Ala Gln Ile Ile Cys
 115 120 125

 Gly Leu Glu His Leu His Gln Arg Arg Ile Val Tyr Arg Asp Leu Lys
 130 135 140

 Pro Glu Asn Val Leu Leu Asp Asn Asp Gly Asn Val Arg Ile Ser Asp
 145 150 155 160

 Leu Gly Leu Ala Val Glu Leu Leu Asp Gly Gln Ser Lys Thr Lys Gly
 165 170 175

 Tyr Ala Gly Thr Pro Gly Phe Met Ala Pro Glu Leu Leu Gln Gly Glu
 180 185 190

 Glu Tyr Asp Phe Ser Val Asp Tyr Phe Ala Leu Gly Val Thr Leu Tyr
 195 200 205

 Glu Met Ile Ala Ala Arg Gly Pro Phe Arg Ala Arg Gly Glu Lys Val
 210 215 220

 Glu Asn Lys Glu Leu Lys His Arg Ile Ile Ser Glu Pro Val Lys Tyr
 225 230 235 240

 Pro Asp Lys Phe Ser Gln Ala Ser Lys Asp Phe Cys Glu Ala Leu Leu
 245 250 255

 Glu Lys Asp Pro Glu Lys Arg Leu Gly Phe Arg Asp Glu Thr Cys Asp
 260 265 270

 Lys Leu Arg Ala His Pro Leu Phe
 275 280

<210> 108
 <211> 375
 <212> PRT
 <213> Homo sapiens

<400> 108
 Gly Leu Glu Pro Leu Leu Asp Leu Leu Gly Val His Gln Glu Leu
 1 5 10 15

 Gly Ala Ser Glu Leu Ala Gln Asp Lys Tyr Val Ala Asp Phe Leu Gln
 20 25 30

 Trp Ala Glu Pro Ile Val Val Arg Leu Lys Glu Val Arg Leu Gln Arg
 35 40 45

 Asp Asp Phe Glu Ile Leu Lys Val Ile Gly Arg Gly Ala Phe Ser Glu
 50 55 60

 Val Ala Val Val Lys Met Lys Gln Thr Gly Gln Val Tyr Ala Met Lys
 65 70 75 80

 Ile Met Asn Lys Trp Asp Met Leu Lys Arg Gly Glu Val Ser Cys Phe
 85 90 95

Arg Glu Glu Arg Asp Val Leu Val Asn Gly Asp Arg Arg Trp Ile Thr
 100 105 110
 Gln Leu His Phe Ala Phe Gln Asp Glu Asn Tyr Leu Tyr Leu Val Met
 115 120 125
 Glu Tyr Tyr Val Gly Gly Asp Leu Leu Thr Leu Leu Ser Lys Phe Gly
 130 135 140
 Glu Arg Ile Pro Ala Glu Met Ala Arg Phe Tyr Leu Ala Glu Ile Val
 145 150 155 160
 Met Ala Ile Asp Ser Val His Arg Leu Gly Tyr Val His Arg Asp Ile
 165 170 175
 Lys Pro Asp Asn Ile Leu Leu Asp Arg Cys Gly His Ile Arg Leu Ala
 180 185 190
 Asp Phe Gly Ser Cys Leu Lys Leu Arg Ala Asp .Gly Thr Val Arg Ser
 195 200 205
 Leu Val Ala Val Gly Thr Pro Asp Tyr Leu Ser Pro Glu Ile Leu Gln
 210 215 220
 Ala Val Gly Gly Pro Gly Thr Gly Ser Tyr Gly Pro Glu Cys Asp
 225 230 235 240
 Trp Trp Ala Leu Gly Val Phe Ala Tyr Glu Met Phe Tyr Gly Gln Thr
 245 250 255
 Pro Phe Tyr Ala Asp Ser Thr Ala Glu Thr Tyr Gly Lys Ile Val His
 260 265 270
 Tyr Lys Glu His Leu Ser Leu Pro Leu Val Asp Glu Gly Val Pro Glu
 275 280 285
 Glu Ala Arg Asp Phe Ile Gln Arg Leu Leu Cys Pro Pro Glu Thr Arg
 290 295 300
 Leu Gly Arg Gly Gly Ala Gly Asp Phe Arg Thr His Pro Phe Phe Phe
 305 310 315 320
 Gly Leu Asp Trp Asp Gly Leu Arg Asp Ser Val Pro Pro Phe Thr Pro
 325 330 335
 Asp Phe Glu Gly Ala Thr Asp Thr Cys Asn Phe Asp Leu Val Glu Asp
 340 345 350
 Gly Leu Thr Ala Met Val Ser Gly Gly Glu Thr Leu Ser Asp Ile
 355 360 365
 Arg Glu Gly Ala Pro Leu Gly
 370 375

<210> 109

<211> 395

<212> PRT

<213> Homo sapiens

<400> 109

Glu	Glu	Arg	Glu	Met	Arg	Gln	Lys	Lys	Leu	Glu	Lys	Val	Met	Glu	Glu
1														15	

Glu	Gly	Leu	Lys	Asp	Glu	Glu	Lys	Arg	Leu	Arg	Arg	Ser	Ala	His	Ala
		20						25					30		

Arg	Lys	Glu	Thr	Glu	Phe	Leu	Arg	Leu	Lys	Arg	Thr	Arg	Leu	Gly	Leu
	35							40				45			

Glu	Asp	Phe	Glu	Ser	Leu	Lys	Val	Ile	Gly	Arg	Gly	Ala	Phe	Gly	Glu
	50							55				60			

Val	Arg	Leu	Val	Gln	Lys	Lys	Asp	Thr	Gly	His	Val	Tyr	Ala	Met	Lys
65								70			75		80		

Ile	Leu	Arg	Lys	Ala	Asp	Met	Leu	Glu	Lys	Glu	Gln	Val	Gly	His	Ile
		85						90				95			

Arg	Ala	Glu	Arg	Asp	Ile	Leu	Val	Glu	Ala	Asp	Ser	Leu	Trp	Val	Val
		100						105				110			

Lys	Met	Phe	Tyr	Ser	Phe	Gln	Asp	Lys	Leu	Asn	Leu	Tyr	Leu	Ile	Met
115								120				125			

Glu	Phe	Leu	Pro	Gly	Gly	Asp	Met	Met	Thr	Leu	Leu	Met	Lys	Lys	Asp
130								135				140			

Thr	Leu	Thr	Glu	Glu	Glu	Thr	Gln	Phe	Tyr	Ile	Ala	Glu	Thr	Val	Leu
145								150			155		160		

Ala	Ile	Asp	Ser	Ile	His	Gln	Leu	Gly	Phe	Ile	His	Arg	Asp	Ile	Lys
		165						170			175				

Pro	Asp	Asn	Leu	Leu	Asp	Ser	Lys	Gly	His	Val	Lys	Leu	Ser	Asp
		180						185			190			

Phe	Gly	Leu	Cys	Thr	Gly	Leu	Lys	Lys	Ala	His	Arg	Thr	Glu	Phe	Tyr
		195						200			205				

Arg	Asn	Leu	Asn	His	Ser	Leu	Pro	Ser	Asp	Phe	Thr	Phe	Gln	Asn	Met
		210						215			220				

Asn	Ser	Lys	Arg	Lys	Ala	Glu	Thr	Trp	Lys	Arg	Asn	Arg	Arg	Gln	Leu
225								230			235		240		

Ala	Phe	Ser	Thr	Val	Gly	Thr	Pro	Asp	Tyr	Ile	Ala	Pro	Glu	Val	Phe
		245						250			255				

Met	Gln	Thr	Gly	Tyr	Asn	Lys	Leu	Cys	Asp	Trp	Trp	Ser	Leu	Gly	Val
		260						265			270				

Ile Met Tyr Glu Met Leu Ile Gly Tyr Pro Pro Phe Cys Ser Glu Thr
 275 280 285

Pro Gln Glu Thr Tyr Lys Lys Val Met Asn Trp Lys Glu Thr Leu Thr
 290 295 300

Phe Pro Pro Glu Val Pro Ile Ser Glu Lys Ala Lys Asp Leu Ile Leu
 305 310 315 320

Arg Phe Cys Cys Glu Trp Glu His Arg Ile Gly Ala Pro Gly Val Glu
 325 330 335

Glu Ile Lys Ser Asn Ser Phe Phe Glu Gly Val Asp Trp Glu His Ile
 340 345 350

Arg Glu Arg Pro Ala Ala Ile Ser Ile Glu Ile Lys Ser Ile Asp Asp
 355 360 365

Thr Ser Asn Phe Asp Glu Phe Pro Glu Ser Asp Ile Leu Lys Pro Thr
 370 375 380

Val Ala Thr Ser Asn His Pro Glu Thr Asp Tyr
 385 390 395

<210> 110

<211> 334

<212> PRT

<213> Homo sapiens

<400> 110

Met Asn Arg Tyr Thr Thr Met Arg Gln Leu Gly Asp Gly Thr Tyr Gly
 1 5 10 15

Ser Val Leu Met Gly Lys Ser Asn Glu Ser Gly Glu Leu Val Ala Ile
 20 25 30

Lys Arg Met Lys Arg Lys Phe Tyr Ser Trp Asp Glu Cys Met Asn Leu
 35 40 45

Arg Glu Val Lys Ser Leu Lys Leu Asn His Ala Asn Val Ile Lys
 50 55 60

Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
 65 70 75 80

Tyr Met Lys Glu Asn Leu Tyr Gln Leu Met Lys Asp Arg Asn Lys Leu
 85 90 95

Phe Pro Glu Ser Val Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
 100 105 110

Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Met Lys Pro
 115 120 125

Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe
 130 135 140

Gly Leu Ala Arg Glu Leu Arg Ser Gln Pro Pro Tyr Thr Asp Tyr Val
 145 150 155 160

Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Ser Val
 165 170 175

Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Ser Ile Met Ala Glu
 180 185 190

Leu Tyr Met Leu Arg Pro Leu Phe Pro Gly Thr Ser Glu Val Asp Glu
 195 200 205

Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Ser Asp Trp
 210 215 220

Pro Glu Gly Tyr Gln Leu Ala Ser Ser Met Asn Phe Arg Phe Pro Gln
 225 230 235 240

Cys Val Pro Ile Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Asn Glu
 245 250 255

Ala Ile Gln Leu Met Thr Glu Met Leu Asn Trp Asp Pro Lys Lys Arg
 260 265 270

Pro Thr Ala Ser Gln Ala Leu Lys His Pro Tyr Phe Gln Val Gly Gln
 275 280 285

Val Leu Gly Pro Ser Ser Asn His Leu Glu Ser Lys Gln Ser Leu Asn
 290 295 300

Lys Gln Leu Gln Pro Leu Glu Ser Lys Pro Ser Leu Val Glu Val Glu
 305 310 315 320

Pro Lys Pro Leu Pro Asp Ile Ile Asp Gln Val Val Gly Gln
 325 330

<210> 111

<211> 335

<212> PRT

<213> Homo sapiens

<400> 111

Met Lys Asn Tyr Lys Ala Ile Gly Lys Ile Gly Glu Gly Thr Phe Ser
 1 5 10 15

Glu Val Met Lys Met Gln Ser Leu Arg Asp Gly Asn Tyr Tyr Ala Cys
 20 25 30

Lys Gln Met Lys Gln Arg Phe Glu Ser Ile Glu Gln Val Asn Asn Leu
 35 40 45

Arg Glu Ile Gln Ala Leu Arg Arg Leu Asn Pro His Pro Asn Ile Leu
 50 55 60

Met Leu His Glu Val Val Phe Asp Arg Lys Ser Gly Ser Leu Ala Leu
 65 70 75 80

Ile Cys Glu Leu Met Asp Met Asn Ile Tyr Glu Leu Ile Arg Gly Arg
 85 90 95

 Arg Tyr Pro Leu Ser Glu Lys Lys Ile Met His Tyr Met Tyr Gln Leu
 100 105 110

 Cys Lys Ser Leu Asp His Ile His Arg Asn Gly Ile Phe His Arg Asp
 115 120 125

 Val Lys Pro Glu Asn Ile Leu Ile Lys Gln Asp Val Leu Lys Leu Gly
 130 135 140

 Asp Phe Gly Ser Cys Arg Ser Val Tyr Ser Lys Gln Pro Tyr Thr Glu
 145 150 155 160

 Tyr Ile Ser Thr Arg Trp Tyr Arg Ala Pro Glu Cys Leu Leu Thr Asp
 165 170 175

 Gly Phe Tyr Thr Tyr Lys Met Asp Leu Trp Ser Ala Gly Cys Val Phe
 180 185 190

 Tyr Glu Ile Ala Ser Leu Gln Pro Leu Phe Pro Gly Val Asn Glu Leu
 195 200 205

 Asp Gln Ile Ser Lys Ile His Asp Val Ile Gly Thr Pro Ala Gln Lys
 210 215 220

 Ile Leu Thr Lys Phe Lys Gln Ser Arg Ala Met Asn Phe Asp Phe Pro
 225 230 235 240

 Phe Lys Lys Gly Ser Gly Ile Pro Leu Leu Thr Thr Asn Leu Ser Pro
 245 250 255

 Gln Cys Leu Ser Leu Leu His Ala Met Val Ala Tyr Asp Pro Asp Glu
 260 265 270

 Arg Ile Ala Ala His Gln Ala Leu Gln His Pro Tyr Phe Gln Glu Gln
 275 280 285

 Arg Lys Thr Glu Lys Arg Ala Leu Gly Ser His Arg Lys Ala Gly Phe
 290 295 300

 Pro Glu His Pro Val Ala Pro Glu Pro Leu Ser Asn Ser Cys Gln Ile
 305 310 315 320

 Ser Lys Glu Gly Arg Lys Gln Lys Gln Ser Leu Lys Gln Glu Glu
 325 330 335

<210> 112
<211> 375
<212> PRT
<213> Homo sapiens

<400> 112
Gln Gln Ala Ala Pro Val Thr Ala Ala Ala Ala Ala Pro Ala Ala
 1 5 10 15

Ala Thr Ala Ala Pro Ala Pro Ala Ala Pro Ala Ala Pro Ala Pro Ala
 20 25 30

Pro Ala Pro Ala Pro Ala Ala Gln Ala Val Gly Trp Pro Ile Cys Arg
 35 40 45

Asp Ala Tyr Glu Leu Gln Glu Val Ile Gly Ser Gly Ala Thr Ala Val
 50 55 60

Val Gln Ala Ala Leu Cys Lys Pro Arg Gln Glu Arg Val Ala Ile Lys
 65 70 80

Arg Ile Asn Leu Glu Lys Cys Gln Thr Ser Met Asp Glu Leu Leu Lys
 85 90 95

Glu Ile Gln Ala Met Ser Gln Cys Ser His Pro Asn Val Val Thr Tyr
 100 105 110

Tyr Thr Ser Phe Val Val Lys Asp Glu Leu Trp Leu Val Met Lys Leu
 115 120 125

Leu Ser Gly Gly Ser Met Leu Asp Ile Ile Lys Tyr Ile Val Asn Arg
 130 135 140

Gly Glu His Lys Asn Gly Val Leu Glu Glu Ala Ile Ile Ala Thr Ile
 145 150 155 160

Leu Lys Glu Val Leu Glu Gly Leu Asp Tyr Leu His Arg Asn Gly Gln
 165 170 175

Ile His Arg Asp Leu Lys Ala Gly Asn Ile Leu Leu Gly Glu Asp Gly
 180 185 190

Ser Val Gln Ile Ala Asp Phe Gly Val Ser Ala Phe Leu Ala Thr Gly
 195 200 205

Gly Asp Val Thr Arg Asn Lys Val Arg Lys Thr Phe Val Gly Thr Pro
 210 215 220

Cys Trp Met Ala Pro Glu Val Met Glu Gln Val Arg Gly Tyr Asp Phe
 225 230 235 240

Lys Ala Asp Met Trp Ser Phe Gly Ile Thr Ala Ile Glu Leu Ala Thr
 245 250 255

Gly Ala Ala Pro Tyr His Lys Tyr Pro Pro Met Lys Val Leu Met Leu
 260 265 270

Thr Leu Gln Asn Asp Pro Pro Thr Leu Glu Thr Gly Val Glu Asp Lys
 275 280 285

Glu Met Met Lys Lys Tyr Gly Lys Ser Phe Arg Lys Leu Leu Ser Leu
 290 295 300

Cys Leu Gln Lys Asp Pro Ser Lys Arg Pro Thr Ala Ala Glu Leu Leu
 305 310 315 320

140

Lys Cys Lys Phe Phe Gln Lys Ala Lys Asn Arg Glu Tyr Leu Ile Glu
325 330 335

Lys Leu Leu Thr Arg Thr Pro Asp Ile Ala Gln Arg Ala Lys Lys Val
340 345 350

Arg Arg Val Pro Gly Ser Ser Gly His Leu His Lys Thr Glu Asp Gly
355 360 365

Asp Trp Glu Trp Ser Asp Asp
370 375

<210> 113

<211> 339

<212> PRT

<213> Homo sapiens

<400> 113

Met Glu Asp Asp Gly Lys Pro Arg Ala Pro Gln Ala Pro Leu His Ser
1 5 10 15

Val Val Gln Gln Leu His Gly Lys Asn Leu Val Phe Ser Asp Gly Tyr
20 25 30

Val Val Lys Glu Thr Ile Gly Val Gly Ser Tyr Ser Glu Cys Lys Arg
35 40 45

Cys Val His Lys Ala Thr Asn Met Glu Tyr Ala Val Lys Val Ile Asp
50 55 60

Lys Ser Lys Arg Asp Pro Ser Glu Glu Ile Glu Ile Leu Leu Arg Tyr
65 70 75 80

Gly Gln His Pro Asn Ile Ile Thr Leu Lys Asp Val Tyr Asp Asp Gly
85 90 95

Lys His Val Tyr Leu Val Thr Glu Leu Met Arg Gly Gly Glu Leu Leu
100 105 110

Asp Lys Ile Leu Arg Gln Lys Phe Phe Ser Glu Arg Glu Ala Ser Phe
115 120 125

Val Leu His Thr Ile Gly Lys Thr Val Glu Tyr Leu His Ser Gln Gly
130 135 140

Val Val His Arg Asp Leu Lys Pro Ser Asn Ile Leu Tyr Val Asp Glu
145 150 155 160

Ser Gly Asn Pro Glu Cys Leu Arg Ile Cys Asp Phe Gly Phe Ala Lys
165 170 175

Gln Leu Arg Ala Glu Asn Gly Leu Leu Met Thr Pro Cys Tyr Thr Ala
180 185 190

Asn Phe Val Ala Pro Glu Val Leu Lys Arg Gln Gly Tyr Asp Glu Gly
195 200 205

Cys Asp Ile Trp Ser Leu Gly Ile Leu Leu Tyr Thr Met Leu Ala Gly
 210 215 220

Tyr Thr Pro Phe Ala Asn Gly Pro Ser Asp Thr Pro Glu Glu Ile Leu
 225 230 235 240

Thr Arg Ile Gly Ser Gly Lys Phe Thr Leu Ser Gly Gly Asn Trp Asn
 245 250 255

Thr Val Ser Glu Thr Ala Lys Asp Leu Val Ser Lys Met Leu His Val
 260 265 270

Asp Pro His Gln Arg Leu Thr Ala Lys Gln Val Leu Gln His Pro Trp
 275 280 285

Val Thr Gln Lys Asp Lys Leu Pro Gln Ser Gln Leu Ser His Gln Asp
 290 295 300

Leu Gln Leu Val Lys Gly Ala Met Ala Ala Thr Tyr Ser Ala Leu Asn
 305 310 315 320

Ser Ser Lys Pro Thr Pro Gln Leu Lys Pro Ile Glu Ser Ser Ile Leu
 325 330 335

Ala Gln Arg

<210> 114
 <211> 357
 <212> PRT
 <213> Homo sapiens

<400> 114
 Phe Pro Ala Pro Ala Pro Pro Pro Gln Pro Pro Thr Pro Ala Leu Pro
 1 5 10 15

His Pro Pro Ala Gln Pro Pro Pro Pro Pro Gln Gln Phe Pro Gln
 20 25 30

Phe His Val Lys Ser Gly Leu Gln Ile Lys Lys Asn Ala Ile Ile Asp
 35 40 45

Asp Tyr Lys Val Thr Ser Gln Val Leu Gly Leu Gly Ile Asn Gly Lys
 50 55 60

Val Leu Gln Ile Phe Asn Lys Arg Thr Gln Glu Lys Phe Ala Leu Lys
 65 70 75 80

Met Leu Gln Asp Cys Pro Lys Ala Arg Arg Glu Val Glu Leu His Trp
 85 90 95

Arg Ala Ser Gln Cys Pro His Ile Val Arg Ile Val Asp Val Tyr Glu
 100 105 110

Asn Leu Tyr Ala Gly Arg Lys Cys Leu Leu Ile Val Met Glu Cys Leu
 115 120 125

Asp Gly Gly Glu Leu Phe Ser Arg Ile Gln Asp Arg Gly Asp Gln Ala
 130 135 140

Phe Thr Glu Arg Glu Ala Ser Glu Ile Met Lys Ser Ile Gly Glu Ala
 145 150 155 160

Ile Gln Tyr Leu His Ser Ile Asn Ile Ala His Arg Asp Val Lys Pro
 165 170 175

Glu Asn Leu Leu Tyr Thr Ser Lys Arg Pro Asn Ala Ile Leu Lys Leu
 180 185 190

Thr Asp Phe Gly Phe Ala Lys Glu Thr Thr Ser His Asn Ser Leu Thr
 195 200 205

Thr Pro Cys Tyr Thr Pro Tyr Tyr Val Ala Pro Glu Val Leu Gly Pro
 210 215 220

Glu Lys Tyr Asp Lys Ser Cys Asp Met Trp Ser Leu Gly Val Ile Met
 225 230 235 240

Tyr Ile Leu Leu Cys Gly Tyr Pro Pro Phe Tyr Ser Asn His Gly Leu
 245 250 255

Ala Ile Ser Pro Gly Met Lys Thr Arg Ile Arg Met Gly Gln Tyr Glu
 260 265 270

Phe Pro Asn Pro Glu Trp Ser Glu Val Ser Glu Glu Val Lys Met Leu
 275 280 285

Ile Arg Asn Leu Leu Lys Thr Glu Pro Thr Gln Arg Met Thr Ile Thr
 290 295 300

Glu Phe Met Asn His Pro Trp Ile Met Gln Ser Thr Lys Val Pro Gln
 305 310 315 320

Thr Pro Leu His Thr Ser Arg Val Leu Lys Glu Asp Lys Glu Arg Trp
 325 330 335

Glu Asp Val Lys Gly Cys Leu His Asp Lys Asn Ser Asp Gln Ala Thr
 340 345 350

Trp Leu Thr Arg Leu
 355

<210> 115
 <211> 366
 <212> PRT
 <213> Homo sapiens

<400> 115
 Met Ala Glu Lys Phe Glu Ser Leu Met Asn Ile His Gly Phe Asp Leu
 1 5 10 15

Gly Ser Arg Tyr Met Asp Leu Lys Pro Leu Gly Cys Gly Gly Asn Gly
 20 25 30

Leu Val Phe Ser Ala Val Asp Asn Asp Cys Asp Lys Arg Val Ala Ile
 35 40 45

 Lys Lys Ile Val Leu Thr Asp Pro Gln Ser Val Lys His Ala Leu Arg
 50 55 60

 Glu Ile Lys Ile Ile Arg Arg Leu Asp His Asp Asn Ile Val Lys Val
 65 70 75 80

 Phe Glu Ile Leu Gly Pro Ser Gly Ser Gln Leu Thr Asp Asp Val Gly
 85 90 95

 Ser Leu Thr Glu Leu Asn Ser Val Tyr Ile Val Gln Glu Tyr Met Glu
 100 105 110

 Thr Asp Leu Ala Asn Val Leu Glu Gln Gly Pro Leu Leu Glu Glu His
 115 120 125

 Ala Arg Leu Phe Met Tyr Gln Leu Leu Arg Gly Leu Lys Tyr Ile His
 130 135 140

 Ser Ala Asn Val Leu His Arg Asp Leu Lys Pro Ala Asn Leu Phe Ile
 145 150 155 160

 Asn Thr Glu Asp Leu Val Leu Lys Ile Gly Asp Phe Gly Leu Ala Arg
 165 170 175

 Ile Met Asp Pro His Tyr Ser His Lys Gly His Leu Ser Glu Gly Leu
 180 185 190

 Val Thr Lys Trp Tyr Arg Ser Pro Arg Leu Leu Leu Ser Pro Asn Asn
 195 200 205

 Tyr Thr Lys Ala Ile Asp Met Trp Ala Ala Gly Cys Ile Phe Ala Glu
 210 215 220

 Met Leu Thr Gly Lys Thr Leu Phe Ala Gly Ala His Glu Leu Glu Gln
 225 230 235 240

 Met Gln Leu Ile Leu Glu Ser Ile Pro Val Val His Glu Glu Asp Arg
 245 250 255

 Gln Glu Leu Leu Ser Val Ile Pro Val Tyr Ile Arg Asn Asp Met Thr
 260 265 270

 Glu Pro His Lys Pro Leu Thr Gln Leu Leu Pro Gly Ile Ser Arg Glu
 275 280 285

 Ala Leu Asp Phe Leu Glu Gln Ile Leu Thr Phe Ser Pro Met Asp Arg
 290 295 300

 Leu Thr Ala Glu Glu Ala Leu Ser His Pro Tyr Met Ser Ile Tyr Ser
 305 310 315 320

 Phe Pro Met Asp Glu Pro Ile Ser Ser His Pro Phe His Ile Glu Asp
 325 330 335

Glu Val Asp Asp Ile Leu Leu Met Asp Glu Thr His Ser His Ile Tyr
 340 345 350

Asn Trp Glu Arg Tyr His Asp Cys Gln Phe Ser Glu His Asp
 355 360 365

<210> 116
 <211> 424
 <212> PRT
 <213> Homo sapiens

<400> 116
 Met Val Ser Ser Gln Lys Leu Glu Lys Pro Ile Glu Met Gly Ser Ser
 1 5 10 15

Glu Pro Leu Pro Ile Ala Asp Gly Asp Arg Arg Arg Lys Lys Lys Arg
 20 25 30

Arg Gly Arg Ala Thr Asp Ser Leu Pro Gly Lys Phe Glu Asp Met Tyr
 35 40 45

Lys Leu Thr Ser Glu Leu Leu Gly Glu Gly Ala Tyr Ala Lys Val Gln
 50 55 60

Gly Ala Val Ser Leu Gln Asn Gly Lys Glu Tyr Ala Val Lys Ile Ile
 65 70 75 80

Glu Lys Gln Ala Gly His Ser Arg Ser Arg Val Phe Arg Glu Val Glu
 85 90 95

Thr Leu Tyr Gln Cys Gln Gly Asn Lys Asn Ile Leu Glu Leu Ile Glu
 100 105 110

Phe Phe Glu Asp Asp Thr Arg Phe Tyr Leu Val Phe Glu Lys Leu Gln
 115 120 125

Gly Gly Ser Ile Leu Ala His Ile Gln Lys Gln Lys His Phe Asn Glu
 130 135 140

Arg Glu Ala Ser Arg Val Val Arg Asp Val Ala Ala Ala Leu Asp Phe
 145 150 155 160

Leu His Thr Lys Asp Lys Val Ser Leu Cys His Leu Gly Trp Ser Ala
 165 170 175

Met Ala Pro Ser Gly Leu Thr Ala Ala Pro Thr Ser Leu Gly Ser Ser
 180 185 190

Asp Pro Pro Thr Ser Ala Ser Gln Val Ala Gly Thr Thr Gly Ile Ala
 195 200 205

His Arg Asp Leu Lys Pro Glu Asn Ile Leu Cys Glu Ser Pro Glu Lys
 210 215 220

Val Ser Pro Val Lys Ile Cys Asp Phe Asp Leu Gly Ser Gly Met Lys
 225 230 235 240

Leu Asn Asn Ser Cys Thr Pro Ile Thr Thr Pro Glu Leu Thr Thr Pro
 245 250 255
 Cys Gly Ser Ala Glu Tyr Met Ala Pro Glu Val Val Glu Val Phe Thr
 260 265 270
 Asp Gln Ala Thr Phe Tyr Asp Lys Arg Cys Asp Leu Trp Ser Leu Gly
 275 280 285
 Val Val Leu Tyr Ile Met Leu Ser Gly Tyr Pro Pro Phe Val Gly His
 290 295 300
 Cys Gly Ala Asp Cys Gly Trp Asp Arg Gly Glu Val Cys Arg Val Cys
 305 310 315 320
 Gln Asn Lys Leu Phe Glu Ser Ile Gln Glu Gly Lys Tyr Glu Phe Pro
 325 330 335
 Asp Lys Asp Trp Ala His Ile Ser Ser Glu Ala Lys Asp Leu Ile Ser
 340 345 350
 Lys Leu Leu Val Arg Asp Ala Lys Gln Arg Leu Ser Ala Ala Gln Val
 355 360 365
 Leu Gln His Pro Trp Val Gln Gly Gln Ala Pro Glu Lys Gly Leu Pro
 370 375 380
 Thr Pro Gln Val Leu Gln Arg Asn Ser Ser Thr Met Asp Leu Thr Leu
 385 390 395 400
 Phe Ala Ala Glu Ala Ile Ala Leu Asn Arg Gln Leu Ser Gln His Glu
 405 410 415
 Glu Asn Glu Leu Ala Glu Glu Pro
 420

<210> 117
 <211> 336
 <212> PRT
 <213> Homo sapiens

<400> 117
 Val Asn Asp Met Gly Ser Ala Ser Ser Ser Ala Ser Leu Arg Val Leu
 1 5 10 15
 Gly Pro Gly Met Asp Gly Ile Met Val Thr Trp Lys Asp Asn Phe Asp
 20 25 30
 Ser Phe Tyr Ser Glu Val Ala Glu Leu Gly Arg Gly Arg Phe Ser Val
 35 40 45
 Val Lys Lys Cys Asp Gln Lys Gly Thr Lys Arg Ala Val Ala Thr Lys
 50 55 60
 Phe Val Asn Lys Lys Leu Met Lys Arg Asp Gln Val Thr His Glu Leu
 65 70 75 80

Gly Ile Leu Gln Ser Leu Gln His Pro Leu Leu Val Gly Leu Leu Asp
 85 90 95
 Thr Phe Glu Thr Pro Thr Ser Tyr Ile Leu Val Leu Glu Met Ala Asp
 100 105 110
 Gln Gly Arg Leu Leu Asp Cys Val Val Arg Trp Gly Ser Leu Thr Glu
 115 120 125
 Gly Lys Ile Arg Ala His Leu Gly Glu Val Leu Glu Ala Val Arg Tyr
 130 135 140
 Leu His Asn Cys Arg Ile Ala His Leu Asp Leu Lys Pro Glu Asn Ile
 145 150 155 160
 Leu Val Asp Glu Ser Leu Ala Lys Pro Thr Ile Lys Leu Ala Asp Phe
 165 170 175
 Gly Asp Ala Val Gln Leu Asn Thr Thr Tyr Tyr Ile His Gln Leu Leu
 180 185 190
 Gly Asn Pro Glu Phe Ala Ala Pro Glu Ile Ile Leu Gly Asn Pro Val
 195 200 205
 Ser Leu Thr Ser Asp Thr Trp Ser Val Gly Val Leu Thr Tyr Val Leu
 210 215 220
 Leu Ser Gly Val Ser Pro Phe Leu Asp Asp Ser Val Glu Glu Thr Cys
 225 230 235 240
 Leu Asn Ile Cys Arg Leu Asp Phe Ser Phe Pro Asp Asp Tyr Phe Lys
 245 250 255
 Gly Val Ser Gln Lys Ala Lys Glu Phe Val Cys Phe Leu Leu Gln Glu
 260 265 270
 Asp Pro Ala Lys Arg Pro Ser Ala Ala Leu Ala Leu Gln Glu Gln Trp
 275 280 285
 Leu Gln Ala Gly Asn Gly Arg Ser Thr Gly Val Leu Asp Thr Ser Arg
 290 295 300
 Leu Thr Ser Phe Ile Glu Arg Arg Lys His Gln Asn Asp Val Arg Pro
 305 310 315 320
 Ile Arg Ser Ile Lys Asn Phe Leu Gln Ser Arg Leu Leu Pro Arg Val
 325 330 335

<210> 118
 <211> 314
 <212> PRT
 <213> Homo sapiens

<400> 118
 His Ser Leu Ser Thr Ser Ser Gly Ser Ser Ile Phe Thr Pro Glu Tyr
 1 5 10 15
 Asp Asp Ser Arg Ile Arg Arg Arg Gly Ser Asp Ile Asp Asn Pro Thr
 20 25 30
 Leu Thr Val Met Asp Ile Ser Pro Pro Ser Arg Ser Pro Arg Ala Pro
 35 40 45
 Thr Asn Trp Arg Leu Gly Lys Leu Leu Gly Gln Gly Ala Phe Gly Arg
 50 55 60
 Val Tyr Leu Cys Tyr Asp Val Asp Thr Gly Arg Glu Leu Ala Val Lys
 65 70 75 80
 Gln Val Gln Phe Asp Pro Asp Ser Pro Glu Thr Ser Lys Glu Val Asn
 85 90 95
 Ala Leu Glu Cys Glu Ile Gln Leu Leu Lys Asn Phe Leu His Glu Arg
 100 105 110
 Ile Val Gln Tyr Tyr Gly Cys Leu Arg Asp Pro Gln Glu Lys Thr Leu
 115 120 125
 Ser Ile Phe Met Glu Tyr Met Pro Gly Gly Ser Ile Lys Asp Gln Leu
 130 135 140
 Lys Ala Tyr Gly Ala Leu Thr Glu Asn Gly Thr Arg Lys Tyr Thr Arg
 145 150 155 160
 Gln Ile Leu Glu Gly Val His Tyr Leu His Ser Asn Met Ile Leu His
 165 170 175
 Arg Asp Ile Lys Gly Ala Asn Ile Leu Arg Asp Ser Thr Gly Asn Val
 180 185 190
 Lys Leu Gly Asp Phe Gly Ala Ser Lys Arg Leu Gln Thr Ile Cys Leu
 195 200 205
 Ser Gly Thr Gly Met Lys Ser Val Thr Gly Thr Pro Tyr Trp Met Ser
 210 215 220
 Pro Glu Val Ile Ser Gly Gln Gly Tyr Gly Arg Lys Ala Asp Ile Trp
 225 230 235 240
 Ser Val Ala Cys Thr Val Val Glu Met Leu Thr Glu Lys Pro Pro Trp
 245 250 255
 Ala Glu Phe Glu Ala Met Ala Ala Ile Phe Lys Ile Ala Thr Gln Pro
 260 265 270
 Thr Asn Pro Lys Leu Pro Pro His Val Ser Asp Tyr Thr Arg Asp Phe
 275 280 285
 Leu Lys Arg Ile Phe Val Glu Ala Lys Leu Arg Pro Ser Ala Asp Glu
 290 295 300

Leu Leu Arg His Met Phe Val His Tyr His
 305 310

<210> 119
<211> 321
<212> PRT
<213> Homo sapiens

<400> 119
Val Asn Glu Arg Asp Thr Val Asn His Thr Thr Val Asp Gly Tyr Thr
 1 5 10 15

Glu Pro His Ile Gln Pro Thr Lys Ser Ser Ser Arg Gln Asn Ile Pro
 20 25 30

Arg Cys Arg Asn Ser Ile Thr Ser Ala Thr Asp Glu Gln Pro His Ile
 35 40 45

Gly Asn Tyr Arg Leu Gln Lys Thr Ile Gly Lys Gly Asn Phe Ala Lys
 50 55 60

Val Lys Leu Ala Arg His Val Leu Thr Gly Arg Glu Val Ala Val Lys
 65 70 75 80

Ile Ile Asp Lys Thr Gln Leu Asn Pro Thr Ser Leu Gln Lys Leu Phe
 85 90 95

Arg Glu Val Arg Ile Met Lys Ile Leu Asn His Pro Asn Ile Val Lys
 100 105 110

Leu Phe Glu Val Ile Glu Thr Glu Lys Thr Leu Tyr Leu Val Met Glu
 115 120 125

Tyr Ala Ser Gly Gly Glu Val Phe Asp Tyr Leu Val Ala His Gly Arg
 130 135 140

Met Lys Glu Lys Glu Ala Arg Ala Lys Phe Arg Gln Ile Val Ser Ala
 145 150 155 160

Val Gln Tyr Cys His Gln Lys Tyr Ile Val His Arg Asp Leu Lys Ala
 165 170 175

Glu Asn Leu Leu Leu Asp Gly Asp Met Asn Ile Lys Ile Ala Asp Phe
 180 185 190

Gly Phe Ser Asn Glu Phe Thr Val Gly Asn Lys Leu Asp Thr Phe Cys
 195 200 205

Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe Gln Gly Lys Lys Tyr
 210 215 220

Asp Gly Pro Glu Val Asp Val Trp Ser Leu Gly Val Ile Leu Tyr Thr
 225 230 235 240

Leu Val Ser Gly Ser Leu Pro Phe Asp Gly Gln Asn Leu Lys Glu Leu
 245 250 255

Arg Glu Arg Val Leu Arg Gly Lys Tyr Arg Ile Pro Phe Tyr Met Ser
 260 265 270
 Thr Asp Cys Glu Asn Leu Leu Lys Lys Leu Leu Val Leu Asn Pro Ile
 275 280 285
 Lys Arg Gly Ser Leu Glu Gln Ile Met Lys Asp Arg Trp Met Asn Val
 290 295 300
 Gly His Glu Glu Glu Leu Lys Pro Tyr Thr Glu Pro Asp Pro Asp
 305 310 315 320
 Phe

<210> 120
 <211> 320
 <212> PRT
 <213> Homo sapiens

<400> 120
 Met Ala Thr Ala Glu Lys Gln Lys His Asp Gly Arg Val Lys Ile Gly
 1 5 10 15
 His Tyr Ile Leu Gly Asp Thr Leu Gly Val Gly Thr Phe Gly Lys Val
 20 25 30
 Lys Val Gly Lys His Glu Leu Thr Gly His Lys Val Ala Val Lys Ile
 35 40 45
 Leu Asn Arg Gln Lys Ile Arg Ser Leu Asp Val Val Gly Lys Ile Arg
 50 55 60
 Arg Glu Ile Gln Asn Leu Lys Leu Phe Arg His Pro His Ile Ile Lys
 65 70 75 80
 Leu Tyr Gln Val Ile Ser Thr Pro Ser Asp Ile Phe Met Val Met Glu
 85 90 95
 Tyr Val Ser Gly Gly Glu Leu Phe Asp Tyr Ile Cys Lys Asn Gly Arg
 100 105 110
 Leu Asp Glu Lys Glu Ser Arg Arg Leu Phe Gln Gln Ile Leu Ser Gly
 115 120 125
 Val Asp Tyr Cys His Arg His Met Val Val His Arg Asp Leu Lys Pro
 130 135 140
 Glu Asn Val Leu Leu Asp Ala His Met Asn Ala Lys Ile Ala Asp Phe
 145 150 155 160
 Gly Leu Ser Asn Met Met Ser Asp Gly Glu Phe Leu Arg Thr Ser Cys
 165 170 175
 Gly Ser Pro Asn Tyr Ala Ala Pro Glu Val Ile Ser Gly Arg Leu Tyr
 180 185 190

150

Ala Gly Pro Glu Val Asp Ile Trp Ser Ser Gly Val Ile Leu Tyr Ala
195 200 205

Leu Leu Cys Gly Thr Leu Pro Phe Asp Asp Asp His Val Pro Thr Leu
210 215 220

Phe Lys Lys Ile Cys Asp Gly Ile Phe Tyr Thr Pro Gln Tyr Leu Asn
225 230 235 240

Pro Ser Val Ile Ser Leu Leu Lys His Met Leu Gln Val Asp Pro Met
245 250 255

Lys Arg Ala Ser Ile Lys Asp Ile Arg Glu His Glu Trp Phe Lys Gln
260 265 270

Asp Leu Pro Lys Tyr Leu Phe Pro Glu Asp Pro Ser Tyr Ser Ser Thr
275 280 285

Met Ile Asp Asp Glu Ala Leu Lys Glu Val Cys Glu Lys Phe Glu Cys
290 295 300

Ser Glu Glu Glu Val Leu Ser Cys Leu Tyr Asn Arg Asn His Gln Asp
305 310 315 320

<210> 121

<211> 315

<212> PRT

<213> Homo sapiens

<400> 121

Met Ala Val Pro Phe Val Glu Asp Trp Asp Leu Val Gln Thr Leu Gly
1 5 10 15

Glu Gly Ala Tyr Gly Glu Val Gln Leu Ala Val Asn Arg Val Thr Glu
20 25 30

Glu Ala Val Ala Val Lys Ile Val Asp Met Lys Arg Ala Val Asp Cys
35 40 45

Pro Glu Asn Ile Lys Lys Glu Ile Cys Ile Asn Lys Met Leu Asn His
50 55 60

Glu Asn Val Val Lys Phe Tyr Gly His Arg Arg Glu Gly Asn Ile Gln
65 70 75 80

Tyr Leu Phe Leu Glu Tyr Cys Ser Gly Gly Glu Leu Phe Asp Arg Ile
85 90 95

Glu Pro Asp Ile Gly Met Pro Glu Pro Asp Ala Gln Arg Phe Phe His
100 105 110

Gln Leu Met Ala Gly Val Val Tyr Leu His Gly Ile Gly Ile Thr His
115 120 125

Arg Asp Ile Lys Pro Glu Asn Leu Leu Leu Asp Glu Arg Asp Asn Leu
 130 135 140

Lys Ile Ser Asp Phe Gly Leu Ala Thr Val Phe Arg Tyr Asn Asn Arg
 145 150 155 160

Glu Arg Leu Leu Asn Lys Met Cys Gly Thr Leu Pro Tyr Val Ala Pro
 165 170 175

Glu Leu Leu Lys Arg Arg Glu Phe His Ala Glu Pro Val Asp Val Trp
 180 185 190

Ser Cys Gly Ile Val Leu Thr Ala Met Leu Ala Gly Glu Leu Pro Trp
 195 200 205

Asp Gln Pro Ser Asp Ser Cys Gln Glu Tyr Ser Asp Trp Lys Glu Lys
 210 215 220

Lys Thr Tyr Leu Asn Pro Trp Lys Lys Ile Asp Ser Ala Pro Leu Ala
 225 230 235 240

Leu Leu His Lys Ile Leu Val Glu Asn Pro Ser Ala Arg Ile Thr Ile
 245 250 255

Pro Asp Ile Lys Lys Asp Arg Trp Tyr Asn Lys Pro Leu Lys Lys Gly
 260 265 270

Ala Lys Arg Pro Arg Val Thr Ser Gly Gly Val Ser Glu Ser Pro Ser
 275 280 285

Gly Phe Ser Lys His Ile Gln Ser Asn Leu Asp Phe Ser Pro Val Asn
 290 295 300

Ser Ala Ser Ser Glu Glu Asn Val Lys Tyr Ser
 305 310 315

<210> 122

<211> 339

<212> PRT

<213> Homo sapiens

<400> 122

Leu Asp Met Asn Gly Arg Cys Ile Cys Pro Ser Leu Pro Tyr Ser Pro
 1 5 10 15

Val Ser Ser Pro Gln Ser Ser Pro Arg Leu Pro Arg Arg Pro Thr Val
 20 25 30

Glu Ser His His Val Ser Ile Thr Gly Met Gln Asp Cys Val Gln Leu
 35 40 45

Asn Gln Tyr Thr Leu Lys Asp Glu Ile Gly Lys Gly Ser Tyr Gly Val
 50 55 60

Val Lys Leu Ala Tyr Asn Glu Asn Asp Asn Thr Tyr Tyr Ala Met Lys
 65 70 75 80

Val Leu Ser Lys Lys Lys Leu Ile Arg Gln Ala Gly Phe Pro Arg Arg
 85 90 95
 Pro Pro Pro Arg Gly Thr Arg Pro Ala Pro Gly Gly Cys Ile Gln Pro
 100 105 110
 Arg Gly Pro Ile Glu Gln Val Tyr Gln Glu Ile Ala Ile Leu Lys Lys
 115 120 125
 Leu Asp His Pro Asn Val Val Lys Leu Val Glu Val Leu Asp Asp Pro
 130 135 140
 Asn Glu Asp His Leu Tyr Met Val Phe Glu Leu Val Asn Gln Gly Pro
 145 150 155 160
 Val Met Glu Val Pro Thr Leu Lys Pro Leu Ser Glu Asp Gln Ala Arg
 165 170 175
 Phe Tyr Phe Gln Asp Leu Ile Lys Gly Ile Glu Tyr Leu His Tyr Gln
 180 185 190
 Lys Ile Ile His Arg Asp Ile Lys Pro Ser Asn Leu Leu Val Gly Glu
 195 200 205
 Asp Gly His Ile Lys Ile Ala Asp Phe Gly Val Ser Asn Glu Phe Lys
 210 215 220
 Gly Ser Asp Ala Leu Leu Ser Asn Thr Val Gly Thr Pro Ala Phe Met
 225 230 235 240
 Ala Pro Glu Ser Leu Ser Glu Thr Arg Lys Ile Phe Ser Gly Lys Ala
 245 250 255
 Leu Asp Val Trp Ala Met Gly Val Thr Leu Tyr Cys Phe Val Phe Gly
 260 265 270
 Gln Cys Pro Phe Met Asp Glu Arg Ile Met Cys Leu His Ser Lys Ile
 275 280 285
 Lys Ser Gln Ala Leu Glu Phe Pro Asp Gln Pro Asp Ile Ala Glu Asp
 290 295 300
 Leu Lys Asp Leu Ile Thr Arg Met Leu Asp Lys Asn Pro Glu Ser Arg
 305 310 315 320
 Ile Val Val Pro Glu Ile Lys Ile Leu Val Lys Thr Met Ile Arg Lys
 325 330 335
 Arg Ser Phe

<210> 123
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 123
 Met Glu Val Val Asp Pro Gln Gln Leu Gly Met Phe Thr Glu Gly Glu
 1 5 10 15
 Leu Met Ser Val Gly Met Asp Thr Phe Ile His Arg Ile Asp Ser Thr
 20 25 30
 Glu Val Ile Tyr Gln Pro Arg Arg Lys Arg Ala Lys Leu Ile Gly Lys
 35 40 45
 Tyr Leu Met Gly Asp Leu Leu Gly Glu Gly Ser Tyr Gly Lys Val Lys
 50 55 60
 Glu Val Leu Asp Ser Glu Thr Leu Cys Arg Arg Ala Val Lys Ile Leu
 65 70 75 80
 Lys Lys Lys Lys Leu Arg Arg Ile Pro Asn Gly Glu Ala Asn Val Lys
 85 90 95
 Lys Glu Ile Gln Leu Leu Arg Arg Leu Arg His Lys Asn Val Ile Gln
 100 105 110
 Leu Val Asp Val Leu Tyr Asn Glu Glu Lys Gln Lys Met Tyr Met Val
 115 120 125
 Met Glu Tyr Cys Val Cys Gly Met Gln Glu Met Leu Asp Ser Val Pro
 130 135 140
 Glu Lys Arg Phe Pro Val Cys Gln Ala His Gly Tyr Phe Cys Gln Leu
 145 150 155 160
 Ile Asp Gly Leu Glu Tyr Leu His Ser Gln Gly Ile Val His Lys Asp
 165 170 175
 Ile Lys Pro Gly Asn Leu Leu Leu Thr Thr Gly Gly Thr Leu Lys Ile
 180 185 190
 Ser Asp Leu Gly Val Ala Glu Ala Leu His Pro Phe Ala Ala Asp Asp
 195 200 205
 Thr Cys Arg Thr Ser Gln Gly Ser Pro Ala Phe Gln Pro Pro Glu Ile
 210 215 220
 Ala Asn Gly Leu Asp Thr Phe Ser Gly Phe Lys Val Asp Ile Trp Ser
 225 230 235 240
 Ala Gly Val Thr Leu Tyr Asn Ile Thr Thr Gly Leu Tyr Pro Phe Glu
 245 250 255
 Gly Asp Asn Ile Tyr Lys Leu Phe Glu Asn Ile Gly Lys Gly Ser Tyr
 260 265 270
 Ala Ile Pro Gly Asp Cys Gly Pro Pro Leu Ser Asp Leu Leu Lys Gly
 275 280 285
 Met Leu Glu Tyr Glu Pro Ala Lys Arg Phe Ser Ile Arg Gln Ile Arg
 290 295 300

Gln His Ser Trp Phe Arg Lys Lys His Pro Pro Ala Glu Ala Pro Val			
305	310	315	320
Pro Ile Pro Pro Ser Pro Asp Thr Lys Asp Arg Trp Arg Ser Met Thr			
325	330	335	
Val Val Pro Tyr Leu Glu Asp Leu His Gly Ala Asp Glu Asp Glu Asp			
340	345	350	
Leu Phe Asp Ile Glu Asp Asp			
355			

<210> 124
<211> 353
<212> PRT
<213> Homo sapiens

<400> 124			
Ala Ala Val Thr Ala Gly Lys Leu Ala Arg Ala Pro Ala Asp Pro Gly			
1	5	10	15
Lys Ala Gly Val Pro Gly Val Ala Ala Pro Gly Ala Pro Ala Ala Ala			
20	25	30	
Pro Pro Ala Lys Glu Ile Pro Glu Val Leu Val Asp Pro Arg Ser Arg			
35	40	45	
Arg Arg Tyr Val Arg Gly Arg Phe Leu Gly Lys Gly Gly Phe Ala Lys			
50	55	60	
Cys Phe Glu Ile Ser Asp Ala Asp Thr Lys Glu Val Phe Ala Gly Lys			
65	70	75	80
Ile Val Pro Lys Ser Leu Leu Leu Lys Pro His Gln Arg Glu Lys Met			
85	90	95	
Ser Met Glu Ile Ser Ile His Arg Ser Leu Ala His Gln His Val Val			
100	105	110	
Gly Phe His Gly Phe Phe Glu Asp Asn Asp Phe Val Phe Val Val Leu			
115	120	125	
Glu Leu Cys Arg Arg Ser Leu Leu Glu Leu His Lys Arg Arg Lys			
130	135	140	
Ala Leu Thr Glu Pro Glu Ala Arg Tyr Tyr Leu Arg Gln Ile Val Leu			
145	150	155	160
Gly Cys Gln Tyr Leu His Arg Asn Arg Val Ile His Arg Asp Leu Lys			
165	170	175	
Leu Gly Asn Leu Phe Leu Asn Glu Asp Leu Glu Val Lys Ile Gly Asp			
180	185	190	
Phe Gly Leu Ala Thr Lys Val Glu Tyr Asp Gly Glu Arg Lys Lys Thr			
195	200	205	

Leu Cys Gly Thr Pro Asn Tyr Ile Ala Pro Glu Val Leu Ser Lys Lys
 210 215 220

Gly His Ser Phe Glu Val Asp Val Trp Ser Ile Gly Cys Ile Met Tyr
 225 230 235 240

Thr Leu Leu Val Gly Lys Pro Pro Phe Glu Thr Ser Cys Leu Lys Glu
 245 250 255

Thr Tyr Leu Arg Ile Lys Lys Asn Glu Tyr Ser Ile Pro Lys His Ile
 260 265 270

Asn Pro Val Ala Ala Ser Leu Ile Gln Lys Met Leu Gln Thr Asp Pro
 275 280 285

Thr Ala Arg Pro Thr Ile Asn Glu Leu Leu Asn Asp Glu Phe Phe Thr
 290 295 300

Ser Gly Tyr Ile Pro Ala Arg Leu Pro Ile Thr Cys Leu Thr Ile Pro
 305 310 315 320

Pro Arg Phe Ser Ile Ala Pro Ser Ser Leu Asp Pro Ser Asn Arg Lys
 325 330 335

Pro Leu Thr Val Leu Asn Lys Gly Leu Glu Asn Pro Leu Pro Glu Arg
 340 345 350

Pro

<210> 125

<211> 322

<212> PRT

<213> Homo sapiens

<400> 125

Thr Ser Val Pro His Pro Val Ser Arg Pro Leu Asn Asn Thr Gln Lys
 1 5 10 15

Ser Lys Gln Pro Leu Pro Ser Ala Pro Glu Asn Asn Pro Glu Glu Glu
 20 25 30

Leu Ala Ser Lys Gln Lys Asn Glu Glu Ser Lys Lys Arg Gln Trp Ala
 35 40 45

Leu Glu Asp Phe Glu Ile Gly Arg Pro Leu Gly Lys Gly Lys Phe Gly
 50 55 60

Asn Val Tyr Leu Ala Arg Glu Lys Gln Ser Lys Phe Ile Leu Ala Leu
 65 70 75 80

Lys Val Leu Phe Lys Ala Gln Leu Glu Lys Ala Gly Val Glu His Gln
 85 90 95

Leu Arg Arg Glu Val Glu Ile Gln Ser His Leu Arg His Pro Asn Ile
 100 105 110

Leu Arg Leu Tyr Gly Tyr Phe His Asp Ala Thr Arg Val Tyr Leu Ile
 115 120 125

 Leu Glu Tyr Ala Pro Leu Gly Thr Val Tyr Arg Glu Leu Gln Lys Leu
 130 135 140

 Ser Lys Phe Asp Glu Gln Arg Thr Ala Thr Tyr Ile Thr Glu Leu Ala
 145 150 155 160

 Asn Ala Leu Ser Tyr Cys His Ser Lys Arg Val Ile His Arg Asp Ile
 165 170 175

 Lys Pro Glu Asn Leu Leu Leu Gly Ser Ala Gly Glu Leu Lys Ile Ala
 180 185 190

 Asp Phe Gly Trp Ser Val His Ala Pro Ser Ser Arg Arg Thr Thr Leu
 195 200 205

 Cys Gly Thr Leu Asp Tyr Leu Pro Pro Glu Met Ile Glu Gly Arg Met
 210 215 220

 His Asp Glu Lys Val Asp Leu Trp Ser Leu Gly Val Leu Cys Tyr Glu
 225 230 235 240

 Phe Leu Val Gly Lys Pro Pro Phe Glu Ala Asn Thr Tyr Gln Glu Thr
 245 250 255

 Tyr Lys Arg Ile Ser Arg Val Glu Phe Thr Phe Pro Asp Phe Val Thr
 260 265 270

 Glu Gly Ala Arg Asp Leu Ile Ser Arg Leu Leu Lys His Asn Pro Ser
 275 280 285

 Gln Arg Pro Met Leu Arg Glu Val Leu Glu His Pro Trp Ile Thr Ala
 290 295 300

 Asn Ser Ser Lys Pro Ser Asn Cys Gln Asn Lys Glu Ser Ala Ser Lys
 305 310 315 320

 Gln Ser

<210> 126
 <211> 380
 <212> PRT
 <213> Homo sapiens

<400> 126
 Gln Ser Ser Ala Lys Arg His Leu Ala Glu Gln Phe Ala Val Gly Glu
 1 5 10 15

 Ile Ile Thr Asp Met Ala Lys Lys Glu Trp Lys Val Gly Leu Pro Ile
 20 25 30

 Gly Gln Gly Gly Phe Gly Cys Ile Tyr Leu Ala Asp Met Asn Ser Ser
 35 40 45

Glu Ser Val Gly Ser Asp Ala Pro Cys Val Val Lys Val Glu Pro Ser
 50 55 60

Asp Asn Gly Pro Leu Phe Thr Glu Leu Lys Phe Tyr Gln Arg Ala Ala
 65 70 75 80

Lys Pro Glu Gln Ile Gln Lys Trp Ile Arg Thr Arg Lys Leu Lys Tyr
 85 90 95

Leu Gly Val Pro Lys Tyr Trp Gly Ser Gly Leu His Asp Lys Asn Gly
 100 105 110

Lys Ser Tyr Arg Phe Met Ile Met Asp Arg Phe Gly Ser Asp Leu Gln
 115 120 125

Lys Ile Tyr Glu Ala Asn Ala Lys Arg Phe Ser Arg Lys Thr Val Leu
 130 135 140

Gln Leu Ser Leu Arg Ile Leu Asp Ile Leu Glu Tyr Ile His Glu His
 145 150 155 160

Glu Tyr Val His Gly Asp Ile Lys Ala Ser Asn Leu Leu Asn Tyr
 165 170 175

Lys Asn Pro Asp Gln Val Tyr Leu Val Asp Tyr Gly Leu Ala Tyr Arg
 180 185 190

Tyr Cys Pro Glu Gly Val His Lys Glu Tyr Lys Glu Asp Pro Lys Arg
 195 200 205

Cys His Asp Gly Thr Ile Glu Phe Thr Ser Ile Asp Ala His Asn Gly
 210 215 220

Val Ala Pro Ser Arg Arg Gly Asp Leu Glu Ile Leu Gly Tyr Cys Met
 225 230 235 240

Ile Gln Trp Leu Thr Gly His Leu Pro Trp Glu Asp Asn Leu Lys Asp
 245 250 255

Pro Lys Tyr Val Arg Asp Ser Lys Ile Arg Tyr Arg Glu Asn Ile Ala
 260 265 270

Ser Leu Met Asp Lys Cys Phe Pro Glu Lys Asn Lys Pro Gly Glu Ile
 275 280 285

Ala Lys Tyr Met Glu Thr Val Lys Leu Leu Asp Tyr Thr Glu Lys Pro
 290 295 300

Leu Tyr Glu Asn Leu Arg Asp Ile Leu Leu Gln Gly Leu Lys Ala Ile
 305 310 315 320

Gly Ser Lys Asp Asp Gly Lys Leu Asp Leu Ser Val Val Glu Asn Gly
 325 330 335

Gly Leu Lys Ala Lys Thr Ile Thr Lys Lys Arg Lys Lys Glu Ile Glu
 340 345 350

Glu Ser Lys Glu Pro Gly Val Glu Asp Thr Glu Trp Ser Asn Thr Gln
 355 360 365

Thr Glu Glu Ala Ile Gln Thr Arg Ser Arg Thr Arg
 370 375 380

<210> 127
 <211> 328
 <212> PRT
 <213> Homo sapiens

<400> 127
 Met Glu Pro Gly Arg Gly Gly Thr Glu Thr Val Gly Lys Phe Glu Phe
 1 5 10 15

Ser Arg Lys Asp Leu Ile Gly His Gly Ala Phe Ala Val Val Phe Lys
 20 25 30

Gly Arg His Arg Glu Lys His Asp Leu Glu Val Ala Val Lys Cys Ile
 35 40 45

Asn Lys Lys Asn Leu Ala Lys Ser Gln Thr Leu Leu Gly Lys Glu Ile
 50 55 60

Lys Ile Leu Lys Glu Leu Lys His Glu Asn Ile Val Ala Leu Tyr Asp
 65 70 75 80

Phe Gln Glu Met Ala Asn Ser Val Tyr Leu Val Met Glu Tyr Cys Asn
 85 90 95

Gly Gly Asp Leu Ala Asp Tyr Leu His Ala Met Arg Thr Leu Ser Glu
 100 105 110

Asp Thr Ile Arg Leu Phe Leu Gln Gln Ile Ala Gly Ala Met Arg Leu
 115 120 125

Leu His Ser Lys Gly Ile Ile His Arg Asp Leu Lys Pro Gln Asn Ile
 130 135 140

Leu Leu Ser Asn Pro Ala Gly Arg Arg Ala Asn Pro Asn Ser Ile Arg
 145 150 155 160

Val Lys Ile Ala Asp Phe Gly Phe Ala Arg Tyr Leu Gln Ser Asn Met
 165 170 175

Met Ala Ala Thr Leu Cys Gly Ser Pro Met Tyr Met Ala Pro Glu Val
 180 185 190

Ile Met Ser Gln His Tyr Asp Gly Lys Ala Asp Leu Trp Ser Ile Gly
 195 200 205

Thr Ile Val Tyr Gln Cys Leu Thr Gly Lys Ala Pro Phe Gln Ala Ser
 210 215 220

Ser Pro Gln Asp Leu Arg Leu Phe Tyr Glu Lys Asn Lys Thr Leu Val
 225 230 235 240

```

Pro Thr Ile Pro Arg Glu Thr Ser Ala Pro Leu Arg Gln Leu Leu
245                      250                      255

Ala Leu Leu Gln Arg Asn His Lys Asp Arg Met Asp Phe Asp Glu Phe
260                      265                      270

Phe His His Pro Phe Leu Asp Ala Ser Pro Ser Val Arg Lys Ser Pro
275                      280                      285

Pro Val Pro Val Pro Ser Tyr Pro Ser Ser Gly Ser Gly Ser Ser Ser
290                      295                      300

Ser Ser Ser Ser Thr Ser His Leu Ala Ser Pro Pro Ser Leu Gly Glu
305                      310                      315                      320

Met Gln Gln Leu Gln Lys Thr Leu
325

```

<210> 128
<211> 376
<212> PRT
<213> *Homo sapiens*

<400> 128
 Ser Ala Val Asn Gly Thr Ser Ser Ala Glu Thr Asn Leu Glu Ala Leu
 1 5 10 15
 .
 Gln Lys Lys Leu Glu Glu Leu Glu Leu Asp Glu Gln Gln Arg Lys Arg
 20 25 30
 Leu Glu Ala Phe Leu Thr Gln Lys Gln Lys Val Gly Glu Leu Lys Asp
 35 40 45
 Asp Asp Phe Glu Lys Ile Ser Glu Leu Gly Ala Gly Asn Gly Gly Val
 50 55 60
 Val Phe Lys Val Ser His Lys Pro Ser Gly Leu Val Met Ala Arg Lys
 65 70 75 80
 Leu Ile His Leu Glu Ile Lys Pro Ala Ile Arg Asn Gln Ile Ile Arg
 85 90 95
 Glu Leu Gln Val Leu His Glu Cys Asn Ser Pro Tyr Ile Val Gly Phe
 100 105 110
 Tyr Gly Ala Phe Tyr Ser Asp Gly Glu Ile Ser Ile Cys Met Glu His
 115 120 125
 Met Asp Gly Gly Ser Leu Asp Gln Val Leu Lys Lys Ala Gly Arg Ile
 130 135 140
 Pro Glu Gln Ile Leu Gly Lys Val Ser Ile Ala Val Ile Lys Gly Leu
 145 150 155 160
 Thr Tyr Leu Arg Glu Lys His Lys Ile Met His Arg Asp Val Lys Pro
 165 170 175

160

Ser Asn Ile Leu Val Asn Ser Arg Gly Glu Ile Lys Leu Cys Asp Phe
180 185 190

Gly Val Ser Gly Gln Leu Ile Asp Ser Met Ala Asn Ser Phe Val Gly
195 200 205

Thr Arg Ser Tyr Met Ser Pro Glu Arg Leu Gln Gly Thr His Tyr Ser
210 215 220

Val Gln Ser Asp Ile Trp Ser Met Gly Leu Ser Leu Val Glu Met Ala
225 230 235 240

Val Gly Arg Tyr Pro Ile Pro Pro Asp Ala Lys Glu Leu Glu Leu
245 250 255

Met Phe Gly Cys Gln Val Glu Gly Asp Ala Ala Glu Thr Pro Pro Arg
260 265 270

Pro Arg Thr Pro Gly Arg Pro Leu Ser Ser Tyr Gly Met Asp Ser Arg
275 280 285

Pro Pro Met Ala Ile Phe Glu Leu Leu Asp Tyr Ile Val Asn Glu Pro
290 295 300

Pro Pro Lys Leu Pro Ser Gly Val Phe Ser Leu Glu Phe Gln Asp Phe
305 310 315 320

Val Asn Lys Cys Leu Ile Lys Asn Pro Ala Glu Arg Ala Asp Leu Lys
325 330 335

Gln Leu Met Val His Ala Phe Ile Lys Arg Ser Asp Ala Glu Glu Val
340 345 350

Asp Phe Ala Gly Trp Leu Cys Ser Thr Ile Gly Leu Asn Gln Pro Ser
355 360 365

Thr Pro Thr His Ala Ala Gly Val
370 375

<210> 129

<211> 348

<212> PRT

<213> Homo sapiens

<400> 129

Trp Glu Ala Gly His Gly Gly Asn Val Ala Leu Pro Leu Lys Glu Thr
1 5 10 15

Ser Val Glu Asn Phe Leu Gly Ala Thr Thr Pro Ala Leu Ala Lys Leu
20 25 30

Gln Val Pro Arg Glu Gln Leu Ser Glu Val Leu Glu Gln Ile Cys Ser
35 40 45

Gly Ser Cys Gly Pro Ile Phe Arg Ala Asn Met Asn Thr Gly Asp Pro
50 55 60

Ser Lys Pro Lys Ser Val Ile Leu Lys Ala Leu Lys Glu Pro Ala Gly
 65 70 75 80
 Leu His Glu Val Gln Asp Phe Leu Gly Arg Ile Gln Phe His Gln Tyr
 85 90 95
 Leu Gly Lys His Lys Asn Leu Val Gln Leu Glu Gly Cys Cys Thr Glu
 100 105 110
 Lys Leu Pro Leu Tyr Met Val Leu Glu Asp Val Ala Gln Gly Asp Leu
 115 120 125
 Leu Gly Phe Leu Trp Thr Cys Arg Arg Asp Val Met Thr Met Asp Gly
 130 135 140
 Leu Leu Tyr Asp Leu Thr Glu Lys Gln Val Tyr His Ile Gly Lys Gln
 145 150 155 160
 Val Leu Leu Ala Leu Glu Phe Leu Gln Glu Lys His Leu Phe His Gly
 165 170 175
 Asp Val Ala Ala Arg Asn Ile Leu Met Gln Ser Asp Leu Thr Ala Lys
 180 185 190
 Leu Cys Gly Leu Gly Leu Ala Tyr Glu Val Tyr Thr Arg Gly Ala Ile
 195 200 205
 Ser Ser Thr Gln Thr Ile Pro Leu Lys Trp Leu Ala Pro Glu Arg Leu
 210 215 220
 Leu Leu Arg Pro Ala Ser Ile Arg Ala Asp Val Trp Ser Phe Gly Ile
 225 230 235 240
 Leu Leu Tyr Glu Met Val Thr Leu Gly Ala Pro Pro Tyr Pro Glu Val
 245 250 255
 Pro Pro Thr Ser Ile Leu Glu His Leu Gln Arg Arg Lys Ile Met Lys
 260 265 270
 Arg Pro Ser Ser Cys Thr His Thr Met Tyr Ser Ile Met Lys Ser Cys
 275 280 285
 Trp Arg Trp Arg Glu Ala Asp Arg Pro Ser Pro Arg Glu Leu Arg Leu
 290 295 300
 Arg Leu Glu Ala Ala Ile Lys Thr Ala Asp Asp Glu Ala Val Leu Gln
 305 310 315 320
 Val Pro Glu Leu Val Val Pro Glu Leu Tyr Ala Ala Val Ala Gly Ile
 325 330 335
 Arg Val Glu Ser Leu Phe Tyr Asn Tyr Ser Met Leu
 340 345

<210> 130
 <211> 348
 <212> PRT
 <213> Homo sapiens

<400> 130
Pro Val Ile Pro Lys Gly Ser Ser Val Gly Thr Gly Thr Asn Leu His
1 5 10 15
Arg Asp Ile Ser Val Ser Ile Ser Val Ser Asn Cys Gln Ile Gln Glu
20 25 30
Asn Val Asp Ile Ser Thr Val Tyr Gln Ile Phe Pro Asp Glu Val Leu
35 40 45
Gly Ser Gly Gln Phe Gly Ile Val Tyr Gly Gly Lys His Arg Lys Thr
50 55 60
Gly Arg Asp Val Ala Ile Lys Ile Ile Asp Lys Leu Arg Phe Pro Thr
65 70 75 80
Lys Gln Glu Ser Gln Leu Arg Asn Glu Val Ala Ile Leu Gln Asn Leu
85 90 95
His His Pro Gly Val Val Asn Leu Glu Cys Met Phe Glu Thr Pro Glu
100 105 110
Arg Val Phe Val Val Met Glu Lys Leu His Gly Asp Met Leu Glu Met
115 120 125
Ile Leu Ser Ser Glu Lys Gly Arg Leu Pro Glu His Ile Thr Lys Phe
130 135 140
Leu Ile Thr Gln Ile Leu Val Ala Leu Arg His Leu His Phe Lys Asn
145 150 155 160
Ile Val His Cys Asp Leu Lys Pro Glu Asn Val Leu Ala Ser Ala
165 170 175
Asp Pro Phe Pro Gln Val Lys Leu Cys Asp Phe Gly Phe Ala Arg Ile
180 185 190
Ile Gly Glu Lys Ser Phe Arg Arg Ser Val Val Gly Thr Pro Ala Tyr
195 200 205
Leu Ala Pro Glu Val Leu Arg Asn Lys Gly Tyr Asn Arg Ser Leu Asp
210 215 220
Met Trp Ser Val Gly Val Ile Ile Tyr Val Ser Leu Ser Gly Thr Phe
225 230 235 240
Pro Phe Asn Glu Asp Glu Asp Ile His Asp Gln Ile Gln Asn Ala Ala
245 250 255
Phe Met Tyr Pro Pro Asn Pro Trp Lys Glu Ile Ser His Glu Ala Ile
260 265 270

Asp Leu Ile Asn Asn Leu Leu Gln Val Lys Met Arg Lys Arg Tyr Ser
 275 280 285

Val Asp Lys Thr Leu Ser His Pro Trp Leu Gln Asp Tyr Gln Thr Trp
 290 295 300

Leu Asp Leu Arg Glu Leu Glu Cys Lys Ile Gly Glu Arg Tyr Ile Thr
 305 310 315 320

His Glu Ser Asp Asp Leu Arg Trp Glu Lys Tyr Ala Gly Glu Gln Arg
 325 330 335

Leu Gln Tyr Pro Thr His Leu Ile Asn Pro Ser Ala
 340 345

<210> 131

<211> 374

<212> PRT

<213> Homo sapiens

<400> 131

Ser Ser Tyr Lys Ser Lys His Arg Ile His His Ser Thr Ser His Arg
 1 5 10 15

Arg Ser His Gly Lys Ser His Arg Arg Lys Arg Thr Arg Ser Val Glu
 20 25 30

Asp Asp Glu Glu Gly His Leu Ile Cys Gln Ser Gly Asp Val Leu Ser
 35 40 45

Ala Arg Tyr Glu Ile Val Asp Thr Leu Gly Glu Gly Ala Phe Gly Lys
 50 55 60

Val Val Glu Cys Ile Asp His Lys Ala Gly Gly Arg His Val Ala Val
 65 70 75 80

Lys Ile Val Lys Asn Val Asp Arg Tyr Cys Glu Ala Ala Arg Ser Glu
 85 90 95

Ile Gln Val Leu Glu His Leu Asn Thr Thr Asp Pro Asn Ser Thr Phe
 100 105 110

Arg Cys Val Gln Met Leu Glu Trp Phe Glu His His Gly His Ile Cys
 115 120 125

Ile Val Phe Glu Leu Leu Gly Leu Ser Thr Tyr Asp Phe Ile Lys Glu
 130 135 140

Asn Gly Phe Leu Pro Phe Arg Leu Asp His Ile Arg Lys Met Ala Tyr
 145 150 155 160

Gln Ile Cys Lys Ser Val Asn Phe Leu His Ser Asn Lys Leu Thr His
 165 170 175

Thr Asp Leu Lys Pro Glu Asn Ile Leu Phe Val Gln Ser Asp Tyr Thr
 180 185 190

Glu Ala Tyr Asn Pro Lys Ile Lys Arg Asp Glu Arg Thr Leu Ile Asn
 195 200 205

Pro Asp Ile Lys Val Val Asp Phe Gly Ser Ala Thr Tyr Asp Asp Glu
 210 215 220

His His Ser Thr Leu Val Ser Thr Arg His Tyr Arg Ala Pro Glu Val
 225 230 235 240

Ile Leu Ala Leu Gly Trp Ser Gln Pro Cys Asp Val Trp Ser Ile Gly
 245 250 255

Cys Ile Leu Ile Glu Tyr Tyr Leu Gly Phe Thr Val Phe Pro Thr His
 260 265 270

Asp Ser Lys Glu His Leu Ala Met Met Glu Arg Ile Leu Gly Pro Leu
 275 280 285

Pro Lys His Met Ile Gln Lys Thr Arg Lys Arg Lys Tyr Phe His His
 290 295 300

Asp Arg Leu Asp Trp Asp Glu His Ser Ser Ala Gly Arg Tyr Val Ser
 305 310 315 320

Arg Ala Cys Lys Pro Leu Lys Glu Phe Met Leu Ser Gln Asp Val Glu
 325 330 335

His Glu Arg Leu Phe Asp Leu Ile Gln Lys Met Leu Glu Tyr Asp Pro
 340 345 350

Ala Lys Arg Ile Thr Leu Arg Glu Ala Leu Lys His Pro Phe Phe Asp
 355 360 365

Leu Leu Lys Lys Ser Ile
 370

<210> 132
 <211> 421
 <212> PRT
 <213> Homo sapiens

<400> 132
 Glu Val Tyr Tyr Ala Lys Lys Lys Arg Arg His Gln Gln Gly Gln Gly
 1 5 10 15

Asp Asp Ser Ser His Lys Lys Glu Arg Lys Val Tyr Asn Asp Gly Tyr
 20 25 30

Asp Asp Asp Asn Tyr Asp Tyr Ile Val Lys Asn Gly Glu Lys Trp Met
 35 40 45

Asp Arg Tyr Glu Ile Asp Ser Leu Ile Gly Lys Gly Ser Phe Gly Gln
 50 55 60

Val Val Lys Ala Tyr Asp Arg Val Glu Gln Glu Trp Val Ala Ile Lys
 65 70 75 80

165

Ile Ile Lys Asn Lys Lys Ala Phe Leu Asn Gln Ala Gln Ile Glu Val
85 90 95

Arg Leu Leu Glu Leu Met Asn Lys His Asp Thr Glu Met Lys Tyr Tyr
100 105 110

Ile Val His Leu Lys Arg His Phe Met Phe Arg Asn His Leu Cys Leu
115 120 125

Val Phe Glu Met Leu Ser Tyr Asn Leu Tyr Asp Leu Leu Arg Asn Thr
130 135 140

Asn Phe Arg Gly Val Ser Leu Asn Leu Thr Arg Lys Phe Ala Gln Gln
145 150 155 160

Met Cys Thr Ala Leu Leu Phe Leu Ala Thr Pro Glu Leu Ser Ile Ile
165 170 175

His Cys Asp Leu Lys Pro Glu Asn Ile Leu Leu Cys Asn Pro Lys Arg
180 185 190

Ser Ala Ile Lys Ile Val Asp Phe Gly Ser Ser Cys Gln Leu Gly Gln
195 200 205

Arg Ile Tyr Gln Tyr Ile Gln Ser Arg Phe Tyr Arg Ser Pro Glu Val
210 215 220

Leu Leu Gly Met Pro Tyr Asp Leu Ala Ile Asp Met Trp Ser Leu Gly
225 230 235 240

Cys Ile Leu Val Glu Met His Thr Gly Glu Pro Leu Phe Ser Gly Ala
245 250 255

Asn Glu Val Asp Gln Met Asn Lys Ile Val Glu Val Leu Gly Ile Pro
260 265 270

Pro Ala His Ile Leu Asp Gln Ala Pro Lys Ala Arg Lys Phe Phe Glu
275 280 285

Lys Leu Pro Asp Gly Thr Trp Asn Leu Lys Lys Thr Lys Asp Gly Lys
290 295 300

Arg Glu Tyr Lys Pro Pro Gly Thr Arg Lys Leu His Asn Ile Leu Gly
305 310 315 320

Val Glu Thr Gly Gly Pro Gly Gly Arg Arg Ala Gly Glu Ser Gly His
325 330 335

Thr Val Ala Asp Tyr Leu Lys Phe Lys Asp Leu Ile Leu Arg Met Leu
340 345 350

Asp Tyr Asp Pro Lys Thr Arg Ile Gln Pro Tyr Tyr Ala Leu Gln His
355 360 365

Ser Phe Phe Lys Lys Thr Ala Asp Glu Gly Thr Asn Thr Ser Asn Ser
370 375 380

Val Ser Thr Ser Pro Ala Met Glu Gln Ser Gln Ser Ser Gly Thr Thr
 385 390 395 400
 Ser Ser Thr Ser Ser Ser Gly Gly Ser Ser Gly Thr Ser Asn Ser
 405 410 415
 Gly Arg Ala Arg Ser
 420

<210> 133
 <211> 429
 <212> PRT
 <213> Homo sapiens

<400> 133
 Glu His Pro Pro Met Ile Gln Asn Asn Ala Ser Gly Ala Thr Val Ala
 1 5 10 15

Thr Ala Thr Thr Ser Thr Ala Thr Ser Lys Asn Ser Gly Ser Asn Ser
 20 25 30

Glu Gly Asp Tyr Gln Leu Val Gln His Glu Val Leu Cys Ser Met Thr
 35 40 45

Asn Thr Tyr Glu Val Leu Glu Phe Leu Gly Arg Gly Thr Phe Gly Gln
 50 55 60

Val Val Lys Cys Trp Lys Arg Gly Thr Asn Glu Ile Val Ala Ile Lys
 65 70 75 80

Ile Leu Lys Asn Arg Pro Ser Tyr Ala Arg Gln Gly Gln Ile Glu Val
 85 90 95

Ser Ile Leu Ala Arg Leu Ser Thr Glu Ser Ala Asp Asp Tyr Asn Phe
 100 105 110

Val Arg Ala Tyr Glu Cys Phe Gln His Lys Asn His Thr Cys Leu Val
 115 120 125

Phe Glu Met Leu Glu Gln Asn Leu Tyr Asp Phe Leu Lys Gln Asn Lys
 130 135 140

Phe Ser Pro Leu Pro Leu Lys Tyr Ile Arg Pro Val Leu Gln Gln Val
 145 150 155 160

Ala Thr Ala Leu Met Lys Leu Lys Ser Leu Gly Leu Ile His Ala Asp
 165 170 175

Leu Lys Pro Glu Asn Ile Met Leu Val Asp Pro Ser Arg Gln Pro Tyr
 180 185 190

Arg Val Lys Val Ile Asp Phe Gly Ser Ala Ser His Val Ser Lys Ala
 195 200 205

Val Cys Ser Thr Tyr Leu Gln Ser Arg Tyr Tyr Arg Ala Pro Glu Ile
 210 215 220

Ile Leu Gly Leu Pro Phe Cys Glu Ala Ile Asp Met Trp Ser Leu Gly
 225 230 235 240

 Cys Val Ile Ala Glu Leu Phe Leu Gly Trp Pro Leu Tyr Pro Gly Ala
 245 250 255

 Ser Glu Tyr Asp Gln Ile Arg Tyr Ile Ser Gln Thr Gln Gly Leu Pro
 260 265 270

 Ala Glu Tyr Leu Leu Ser Ala Gly Thr Lys Thr Thr Arg Phe Phe Asn
 275 280 285

 Arg Asp Thr Asp Ser Pro Tyr Pro Leu Trp Arg Leu Lys Thr Pro Asp
 290 295 300

 Asp His Glu Ala Glu Thr Gly Ile Lys Ser Lys Glu Ala Arg Lys Tyr
 305 310 315 320

 Ile Phe Asn Cys Leu Asp Asp Met Ala Gln Val Asn Met Thr Thr Asp
 325 330 335

 Leu Glu Gly Ser Asp Met Leu Val Glu Lys Ala Asp Arg Arg Glu Phe
 340 345 350

 Ile Asp Leu Leu Lys Lys Met Leu Thr Ile Asp Ala Asp Lys Arg Ile
 355 360 365

 Thr Pro Ile Glu Thr Leu Asn His Pro Phe Val Thr Met Thr His Leu
 370 375 380

 Leu Asp Phe Pro His Ser Thr His Val Lys Ser Cys Phe Gln Asn Met
 385 390 395 400

 Glu Ile Cys Lys Arg Arg Val Asn Met Tyr Asp Thr Val Asn Gln Ser
 405 410 415

 Lys Thr Pro Phe Ile Thr His Val Ala Pro Ser Thr Ser
 420 425

 <210> 134
 <211> 371
 <212> PRT
 <213> Homo sapiens

 <400> 134
 Asp Asp Met Phe Ala Ala Tyr Phe Asp Ser Ala Arg Leu Arg Ala Ala
 1 5 10 15

 Gly Ile Gly Lys Asp Phe Lys Glu Asn Pro Asn Leu Arg Asp Asn Trp
 20 25 30

 Thr Asp Ala Glu Gly Tyr Tyr Arg Val Asn Ile Gly Glu Val Leu Asp
 35 40 45

 Lys Arg Tyr Asn Val Tyr Gly Tyr Thr Gly Gln Gly Val Phe Ser Asn
 50 55 60

Val Val Arg Ala Arg Asp Asn Ala Arg Ala Asn Gln Glu Val Ala Val
 65 70 75 80
 Lys Ile Ile Arg Asn Asn Glu Leu Met Gln Lys Thr Gly Leu Lys Glu
 85 90 95
 Leu Glu Phe Leu Lys Lys Leu Asn Asp Ala Asp Pro Asp Asp Lys Phe
 100 105 110
 His Cys Leu Arg Leu Phe Arg His Phe Tyr His Lys Gln His Leu Cys
 115 120 125
 Leu Val Phe Glu Pro Leu Ser Met Asn Leu Arg Glu Val Leu Lys Lys
 130 135 140
 Tyr Gly Lys Asp Val Gly Leu His Ile Lys Ala Val Arg Ser Tyr Ser
 145 150 155 160
 Gln Gln Leu Phe Leu Ala Leu Lys Leu Leu Lys Arg Cys Asn Ile Leu
 165 170 175
 His Ala Asp Ile Lys Pro Asp Asn Ile Leu Val Asn Glu Ser Lys Thr
 180 185 190
 Ile Leu Lys Leu Cys Asp Phe Gly Ser Ala Ser His Val Ala Asp Asn
 195 200 205
 Asp Ile Thr Pro Tyr Leu Val Ser Arg Phe Tyr Arg Ala Pro Glu Ile
 210 215 220
 Ile Ile Gly Lys Ser Tyr Asp Tyr Gly Ile Asp Met Trp Ser Val Gly
 225 230 235 240
 Cys Thr Leu Tyr Glu Leu Tyr Thr Gly Lys Ile Leu Phe Pro Gly Lys
 245 250 255
 Thr Asn Asn His Met Leu Lys Leu Ala Met Asp Leu Lys Gly Lys Met
 260 265 270
 Pro Asn Lys Met Ile Arg Lys Gly Val Phe Lys Asp Gln His Phe Asp
 275 280 285
 Gln Asn Leu Asn Phe Met Tyr Ile Glu Val Asp Lys Val Thr Glu Arg
 290 295 300
 Glu Lys Val Thr Val Met Ser Thr Ile Asn Pro Thr Lys Asp Leu Leu
 305 310 315 320
 Ala Asp Leu Ile Gly Cys Gln Arg Leu Pro Glu Asp Gln Arg Lys Lys
 325 330 335
 Val His Gln Leu Lys Asp Leu Leu Asp Gln Ile Leu Met Leu Asp Pro
 340 345 350
 Ala Lys Arg Ile Ser Ile Asn Gln Ala Leu Gln His Ala Phe Ile Gln
 355 360 365

Glu Lys Ile
370

<210> 135
<211> 336
<212> PRT
<213> Homo sapiens

<400> 135
Met Ser Thr Ala Ser Ala Ala Ser Ser Ser Ser Ser Ala Gly
1 5 10 15

Glu Met Ile Glu Ala Pro Ser Gln Val Leu Asn Phe Glu Glu Ile Asp
20 25 30

Tyr Lys Glu Ile Glu Val Glu Val Val Gly Arg Gly Ala Phe Gly
35 40 45

Val Val Cys Lys Ala Lys Trp Arg Ala Lys Asp Val Ala Ile Lys Gln
50 55 60

Ile Glu Ser Glu Ser Glu Arg Lys Ala Phe Ile Val Glu Leu Arg Gln
65 70 75 80

Leu Ser Arg Val Asn His Pro Asn Ile Val Lys Leu Tyr Gly Ala Cys
85 90 95

Leu Asn Pro Val Cys Leu Val Met Glu Tyr Ala Glu Gly Gly Ser Leu
100 105 110

Tyr Asn Val Leu His Gly Ala Glu Pro Leu Pro Tyr Tyr Thr Ala Ala
115 120 125

His Ala Met Ser Trp Cys Leu Gln Cys Ser Gln Gly Val Ala Tyr Leu
130 135 140

His Ser Met Gln Pro Lys Ala Leu Ile His Arg Asp Leu Lys Pro Pro
145 150 155 160

Asn Leu Leu Leu Val Ala Gly Gly Thr Val Leu Lys Ile Cys Asp Phe
165 170 175

Gly Thr Ala Cys Asp Ile Gln Thr His Met Thr Asn Asn Lys Gly Ser
180 185 190

Ala Ala Trp Met Ala Pro Glu Val Phe Glu Gly Ser Asn Tyr Ser Glu
195 200 205

Lys Cys Asp Val Phe Ser Trp Gly Ile Ile Leu Trp Glu Val Ile Thr
210 215 220

Arg Arg Lys Pro Phe Asp Glu Ile Gly Gly Pro Ala Phe Arg Ile Met
225 230 235 240

Trp Ala Val His Asn Gly Thr Arg Pro Pro Leu Ile Lys Asn Leu Pro
245 250 255

170

Lys Pro Ile Glu Ser Leu Met Thr Arg Cys Trp Ser Lys Asp Pro Ser
260 265 270
Gln Arg Pro Ser Met Glu Glu Ile Val Lys Ile Met Thr His Leu Met
275 280 285
Arg Tyr Phe Pro Gly Ala Asp Glu Pro Leu Gln Tyr Pro Cys Gln Tyr
290 295 300
Ser Asp Glu Gly Gln Ser Asn Ser Ala Thr Ser Thr Gly Ser Phe Met
305 310 315 320
Asp Ile Ala Ser Thr Asn Thr Ser Asn Lys Ser Asp Thr Asn Met Glu
325 330 335

<210> 136

<211> 330

<212> PRT

<213> Homo sapiens

<400> 136

Ala Pro Ala Ala Pro Ala Gly Leu Gln Leu Pro Gln Glu Ile Pro Phe
1 5 10 15

His Glu Leu Gln Leu Glu Glu Ile Ile Gly Val Gly Gly Phe Gly Lys
20 25 30

Val Tyr Arg Ala Leu Trp Arg Gly Glu Glu Val Ala Val Lys Ala Ala
35 40 45

Arg Leu Asp Pro Glu Lys Asp Pro Ala Val Thr Ala Glu Gln Val Cys
50 55 60

Gln Glu Ala Arg Leu Phe Gly Ala Leu Gln His Pro Asn Ile Ile Ala
65 70 75 80

Leu Arg Gly Ala Cys Leu Asn Pro Pro His Leu Cys Leu Val Met Glu
85 90 95

Tyr Ala Arg Gly Gly Ala Leu Ser Arg Val Leu Ala Gly Arg Arg Val
100 105 110

Pro Pro His Val Leu Val Asn Trp Ala Val Gln Val Ala Arg Gly Met
115 120 125

Asn Tyr Leu His Asn Asp Ala Pro Val Pro Ile Ile His Arg Asp Leu
130 135 140

Lys Ser Ile Asn Ile Leu Ile Leu Glu Ala Ile Glu Asn His Asn Leu
145 150 155 160

Ala Asp Thr Val Leu Lys Ile Thr Asp Phe Gly Leu Ala Arg Glu Trp
165 170 175

His Lys Thr Thr Lys Met Ser Ala Ala Gly Thr Tyr Ala Trp Met Ala
 180 185 190
 Pro Glu Val Ile Arg Leu Ser Leu Phe Ser Lys Ser Ser Asp Val Trp
 195 200 205
 Ser Phe Gly Val Leu Leu Trp Glu Leu Leu Thr Gly Glu Val Pro Tyr
 210 215 220
 Arg Glu Ile Asp Ala Leu Ala Val Ala Tyr Gly Val Ala Met Asn Lys
 225 230 235 240
 Leu Thr Leu Pro Ile Pro Ser Thr Cys Pro Glu Pro Phe Ala Arg Leu
 245 250 255
 Leu Glu Glu Cys Trp Asp Pro Asp Pro His Gly Arg Pro Asp Phe Gly
 260 265 270
 Ser Ile Leu Lys Arg Leu Glu Val Ile Glu Gln Ser Ala Leu Phe Gln
 275 280 285
 Met Pro Leu Glu Ser Phe His Ser Leu Gln Glu Asp Trp Lys Leu Glu
 290 295 300
 Ile Gln His Met Phe Asp Asp Leu Arg Thr Lys Glu Lys Glu Leu Arg
 305 310 315 320
 Ser Arg Glu Glu Glu Leu Leu Arg Ala Ala
 325 330

<210> 137
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 137
 Met Ser Ser Leu Gly Ala Ser Phe Val Gln Ile Lys Phe Asp Asp Leu
 1 5 10 15
 Gln Phe Phe Glu Asn Cys Gly Gly Ser Phe Gly Ser Val Tyr Arg
 20 25 30
 Ala Lys Trp Ile Ser Gln Asp Lys Glu Val Ala Val Lys Lys Leu Leu
 35 40 45
 Lys Ile Glu Lys Glu Ala Glu Ile Leu Ser Val Leu Ser His Arg Asn
 50 55 60
 Ile Ile Gln Phe Tyr Gly Val Ile Leu Glu Pro Pro Asn Tyr Gly Ile
 65 70 75 80
 Val Thr Glu Tyr Ala Ser Leu Gly Ser Leu Tyr Asp Tyr Ile Asn Ser
 85 90 95
 Asn Arg Ser Glu Glu Met Asp Met Asp His Ile Met Thr Trp Ala Thr
 100 105 110

Asp Val Ala Lys Gly Met His Tyr Leu His Met Glu Ala Pro Val Lys
 115 120 125

Val Ile His Arg Asp Leu Lys Ser Arg Asn Val Val Ile Ala Ala Asp
 130 135 140

Gly Val Leu Lys Ile Cys Asp Phe Gly Ala Ser Arg Phe His Asn His
 145 150 155 160

Thr Thr His Met Ser Leu Val Gly Thr Phe Pro Trp Met Ala Pro Glu
 165 170 175

Val Ile Gln Ser Leu Pro Val Ser Glu Thr Cys Asp Thr Tyr Ser Tyr
 180 185 190

Gly Val Val Leu Trp Glu Met Leu Thr Arg Glu Val Pro Phe Lys Gly
 195 200 205

Leu Glu Gly Leu Gln Val Ala Trp Leu Val Val Glu Lys Asn Glu Arg
 210 215 220

Leu Thr Ile Pro Ser Ser Cys Pro Arg Ser Phe Ala Glu Leu Leu His
 225 230 235 240

Gln Cys Trp Glu Ala Asp Ala Lys Lys Arg Pro Ser Phe Lys Gln Ile
 245 250 255

Ile Ser Ile Leu Glu Ser Met Ser Asn Asp Thr Ser Leu Pro Asp Lys
 260 265 270

Cys Asn Ser Phe Leu His Asn Lys Ala Glu Trp Arg Cys Glu Ile Glu
 275 280 285

Ala Thr Leu Glu Arg Leu Lys Lys Leu Glu Arg Asp Leu Ser Phe Lys
 290 295 300

Glu Gln Glu Leu Lys Glu Arg Glu
 305 310

<210> 138
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 138
 Cys Asn Glu Tyr Ser Gln Pro Gly Gly Asp Gly Ser Tyr Val Ser Val
 1 5 10 15

Pro Ser Pro Leu Gly Lys Ile Lys Ser Met Thr Lys Glu Lys Ala Asp
 20 25 30

Ile Leu Leu Leu Arg Ala Gly Leu Pro Ser His Phe His Leu Gln Leu
 35 40 45

Ser Glu Ile Glu Phe His Glu Ile Ile Gly Ser Gly Ser Phe Gly Lys
 50 55 60

Val Tyr Lys Gly Arg Cys Arg Asn Lys Ile Val Ala Ile Lys Arg Tyr
 65 70 75 80
 Arg Ala Asn Thr Tyr Cys Ser Lys Ser Asp Val Asp Met Phe Cys Arg
 85 90 95
 Glu Val Ser Ile Leu Cys Gln Leu Asn His Pro Cys Val Ile Gln Phe
 100 105 110
 Val Gly Ala Cys Leu Asn Asp Pro Ser Gln Phe Ala Ile Val Thr Gln
 115 120 125
 Tyr Ile Ser Gly Gly Ser Leu Phe Ser Leu Leu His Glu Gln Lys Arg
 130 135 140
 Ile Leu Asp Leu Gln Ser Lys Leu Ile Ile Ala Val Asp Val Ala Lys
 145 150 155 160
 Gly Met Glu Tyr Leu His Asn Leu Thr Gln Pro Ile Ile His Arg Asp
 165 170 175
 Leu Asn Ser His Asn Ile Leu Leu Tyr Glu Asp Gly His Ala Val Val
 180 185 190
 Ala Asp Phe Gly Glu Ser Arg Phe Leu Gln Ser Leu Asp Glu Asp Asn
 195 200 205
 Met Thr Lys Gln Pro Gly Asn Leu Arg Trp Met Ala Pro Glu Val Phe
 210 215 220
 Thr Gln Cys Thr Arg Tyr Thr Ile Lys Ala Asp Val Phe Ser Tyr Ala
 225 230 235 240
 Leu Cys Leu Trp Glu Ile Leu Thr Gly Glu Ile Pro Phe Ala His Leu
 245 250 255
 Lys Pro Ala Ala Ala Ala Asp Met Ala Tyr His His Ile Arg Pro
 260 265 270
 Pro Ile Gly Tyr Ser Ile Pro Lys Pro Ile Ser Ser Leu Leu Ile Arg
 275 280 285
 Gly Trp Asn Ala Cys Pro Glu Gly Arg Pro Glu Phe Ser Glu Val Val
 290 295 300
 Met Lys Leu Glu Glu Cys Leu Cys Asn Ile Glu Leu Met Ser Pro Ala
 305 310 315 320
 Ser Ser Asn Ser Ser Gly Ser Leu Ser Pro Ser Ser Ser Asp Cys
 325 330 335
 Leu Val Asn Arg Gly Gly Pro Gly Arg Ser His Val Ala Ala Leu Arg
 340 345 350
 Ser Arg Phe Glu Leu Glu Tyr
 355

<210> 139

<211> 350

<212> PRT

<213> Homo sapiens

<400> 139

Asn	Leu	Ser	Pro	Thr	Gly	Trp	Ser	Gln	Pro	Lys	Thr	Pro	Val	Pro	Ala
1									10					15	

Gln	Arg	Glu	Arg	Ala	Pro	Val	Ser	Gly	Thr	Gln	Glu	Lys	Asn	Lys	Ile
								25				30			

Arg	Pro	Arg	Gly	Gln	Arg	Asp	Ser	Ser	Tyr	Tyr	Trp	Glu	Ile	Glu	Ala
								40				45			

Ser	Glu	Val	Met	Leu	Ser	Thr	Arg	Ile	Gly	Ser	Gly	Ser	Phe	Gly	Thr
							55				60				

Val	Tyr	Lys	Gly	Lys	Trp	His	Gly	Asp	Val	Ala	Val	Lys	Ile	Leu	Lys
							70				75			80	

Val	Val	Asp	Pro	Thr	Pro	Glu	Gln	Phe	Gln	Ala	Phe	Arg	Asn	Glu	Val
							85				90		95		

Ala	Val	Leu	Arg	Lys	Thr	Arg	His	Val	Asn	Ile	Leu	Leu	Phe	Met	Gly
							100				105		110		

Tyr	Met	Thr	Lys	Asp	Asn	Leu	Ala	Ile	Val	Thr	Gln	Trp	Cys	Glu	Gly
							115				120		125		

Ser	Ser	Leu	Tyr	Lys	His	Leu	His	Val	Gln	Glu	Thr	Lys	Phe	Gln	Met
							130				135		140		

Phe	Gln	Leu	Ile	Asp	Ile	Ala	Arg	Gln	Thr	Ala	Gln	Gly	Met	Asp	Tyr
							145				155		160		

Leu	His	Ala	Lys	Asn	Ile	Ile	His	Arg	Asp	Met	Lys	Ser	Asn	Asn	Ile
							165				170		175		

Phe	Leu	His	Glu	Gly	Leu	Thr	Val	Lys	Ile	Gly	Asp	Phe	Gly	Leu	Ala
							180				185		190		

Thr	Val	Lys	Ser	Arg	Trp	Ser	Gly	Ser	Gln	Gln	Val	Glu	Gln	Pro	Thr
							195				200		205		

Gly	Ser	Val	Leu	Trp	Met	Ala	Pro	Glu	Val	Ile	Arg	Met	Gln	Asp	Asn
							210				215		220		

Asn	Pro	Phe	Ser	Phe	Gln	Ser	Asp	Val	Tyr	Ser	Tyr	Gly	Ile	Val	Leu
							225				230		240		

Tyr	Glu	Leu	Met	Thr	Gly	Glu	Leu	Pro	Tyr	Ser	His	Ile	Asn	Asn	Arg
							245				250		255		

Asp	Gln	Ile	Ile	Phe	Met	Val	Gly	Arg	Gly	Tyr	Ala	Ser	Pro	Asp	Leu
							260				265		270		

175

Ser Lys Leu Tyr Lys Asn Cys Pro Lys Ala Met Lys Arg Leu Val Ala
275 280 285

Asp Cys Val Lys Lys Val Lys Glu Glu Arg Pro Leu Phe Pro Gln Ile
290 295 300

Leu Ser Ser Ile Glu Leu Leu Gln His Ser Leu Pro Lys Ile Asn Arg
305 310 315 320

Ser Ala Ser Glu Pro Ser Leu His Arg Ala Ala His Thr Glu Asp Ile
325 330 335

Asn Ala Cys Thr Leu Thr Thr Ser Pro Arg Leu Pro Val Phe
340 345 350

<210> 140

<211> 335

<212> PRT

<213> Homo sapiens

<400> 140

Met Glu Gly Asp Gly Gly Thr Pro Trp Ala Leu Ala Leu Leu Arg Thr
1 5 10 15

Phe Asp Ala Gly Glu Phe Thr Gly Trp Glu Lys Val Gly Ser Gly Gly
20 25 30

Phe Gly Gln Val Tyr Lys Val Arg His Val His Trp Lys Thr Trp Leu
35 40 45

Ala Ile Lys Cys Ser Pro Ser Leu His Val Asp Asp Arg Glu Arg Met
50 55 60

Glu Leu Leu Glu Glu Ala Lys Lys Met Glu Met Ala Lys Phe Arg Tyr
65 70 75 80

Ile Leu Pro Val Tyr Gly Ile Cys Arg Glu Pro Val Gly Leu Val Met
85 90 95

Glu Tyr Met Glu Thr Gly Ser Leu Glu Lys Leu Leu Ala Ser Glu Pro
100 105 110

Leu Pro Trp Asp Leu Arg Phe Arg Ile Ile His Glu Thr Ala Val Gly
115 120 125

Met Asn Phe Leu His Cys Met Ala Pro Pro Leu Leu His Leu Asp Leu
130 135 140

Lys Pro Ala Asn Ile Leu Leu Asp Ala His Tyr His Val Lys Ile Ser
145 150 155 160

Asp Phe Gly Leu Ala Lys Cys Asn Gly Leu Ser His Ser His Asp Leu
165 170 175

Ser Met Asp Gly Leu Phe Gly Thr Ile Ala Tyr Leu Pro Pro Glu Arg
180 185 190

Ile Arg Glu Lys Ser Arg Leu Phe Asp Thr Lys His Asp Val Tyr Ser
 195 200 205

Phe Ala Ile Val Ile Trp Gly Val Leu Thr Gln Lys Lys Pro Phe Ala
 210 215 220

Asp Glu Lys Asn Ile Leu His Ile Met Val Lys Val Val Lys Gly His
 225 230 235 240

Arg Pro Glu Leu Pro Pro Val Cys Arg Ala Arg Pro Arg Ala Cys Ser
 245 250 255

His Leu Ile Arg Leu Met Gln Arg Cys Trp Gln Gly Asp Pro Arg Val
 260 265 270

Arg Pro Thr Phe Gln Glu Ile Thr Ser Glu Thr Glu Asp Leu Cys Glu
 275 280 285

Lys Pro Asp Asp Glu Val Lys Glu Thr Ala His Asp Leu Asp Val Lys
 290 295 300

Ser Pro Pro Glu Pro Arg Ser Glu Val Val Pro Ala Arg Leu Lys Arg
 305 310 315 320

Ala Ser Ala Pro Thr Phe Asp Asn Asp Tyr Ser Leu Ser Glu Leu
 325 330 335

<210> 141

<211> 359

<212> PRT

<213> Homo sapiens

<400> 141

Arg Gln Lys Pro Val Leu Arg Ser Cys Ser Ile Asp Arg Ser Pro Gly
 1 5 10 15

Ala Gly Ser Leu Gly Ser Pro Ala Ser Gln Arg Lys Asp Leu Gly Arg
 20 25 30

Ser Glu Ser Leu Arg Val Val Cys Arg Pro His Arg Ile Phe Arg Pro
 35 40 45

Ser Asp Leu Ile His Gly Glu Val Leu Gly Lys Gly Cys Phe Gly Gln
 50 55 60

Ala Ile Lys Val Thr His Arg Glu Thr Gly Glu Val Met Val Met Lys
 65 70 75 80

Glu Leu Ile Arg Phe Asp Glu Glu Thr Gln Arg Thr Phe Leu Lys Glu
 85 90 95

Val Lys Val Met Arg Cys Leu Glu His Pro Asn Val Leu Lys Phe Ile
 100 105 110

Gly Val Leu Tyr Lys Asp Lys Arg Leu Asn Phe Ile Thr Glu Tyr Ile
 115 120 125

Lys Gly Gly Thr Leu Arg Gly Ile Ile Lys Ser Met Asp Ser Gln Tyr
 130 135 140

Pro Trp Ser Gln Arg Val Ser Phe Ala Lys Asp Ile Ala Ser Gly Met
 145 150 155 160

Ala Tyr Leu His Ser Met Asn Ile Ile His Arg Asp Leu Asn Ser His
 165 170 175

Asn Cys Leu Val Arg Glu Asn Lys Asn Val Val Val Ala Asp Phe Gly
 180 185 190

Leu Ala Arg Leu Met Val Asp Glu Lys Thr Gln Pro Glu Gly Leu Arg
 195 200 205

Ser Leu Lys Lys Pro Asp Arg Lys Lys Arg Tyr Thr Val Val Gly Asn
 210 215 220

Pro Tyr Trp Met Ala Pro Glu Met Ile Asn Gly Arg Ser Tyr Asp Glu
 225 230 235 240

Lys Val Asp Val Phe Ser Phe Gly Ile Val Leu Cys Glu Ile Ile Gly
 245 250 255

Arg Val Asn Ala Asp Pro Asp Tyr Leu Pro Arg Thr Met Asp Phe Gly
 260 265 270

Leu Asn Val Arg Gly Phe Leu Asp Arg Tyr Cys Pro Pro Asn Cys Pro
 275 280 285

Pro Ser Phe Phe Pro Ile Thr Val Arg Cys Cys Asp Leu Asp Pro Glu
 290 295 300

Lys Arg Pro Ser Phe Val Lys Leu Glu His Trp Leu Glu Thr Leu Arg
 305 310 315 320

Met His Leu Ala Gly His Leu Pro Leu Gly Pro Gln Leu Glu Gln Leu
 325 330 335

Asp Arg Gly Phe Trp Glu Thr Tyr Arg Arg Gly Glu Ser Gly Leu Pro
 340 345 350

Ala His Pro Glu Val Pro Asp
 355

<210> 142
 <211> 358
 <212> PRT
 <213> Homo sapiens

<400> 142
 Pro Leu Arg Gly Pro Gly Pro Gly Pro Gly Glu Val Pro Gly Glu Gly
 1 5 10 15

Pro Pro Gly Pro Gly Gly Thr Gly Gly Pro Gly Arg Gly Arg Pro
 20 25 30

Ser Ser Tyr Arg Val Leu Arg Ser Ala Val Ser Ser Leu Ala Arg Val
 35 40 45

 Asp Asp Phe His Cys Ala Glu Lys Ile Gly Ala Gly Phe Phe Ser Glu
 50 55 60

 Val Tyr Lys Val Arg His Arg Gln Ser Gly Gln Val Met Val Leu Lys
 65 70 75 80

 Met Asn Lys Leu Pro Ser Asn Arg Gly Asn Thr Leu Arg Glu Val Gln
 85 90 95

 Leu Met Asn Arg Leu Arg His Pro Asn Ile Leu Arg Phe Met Gly Val
 100 105 110

 Cys Val His Gln Gly Gln Leu His Ala Leu Thr Glu Tyr Met Asn Gly
 115 120 125

 Gly Thr Leu Glu Gln Leu Leu Ser Ser Pro Glu Pro Leu Ser Trp Pro
 130 135 140

 Val Arg Leu His Leu Ala Leu Asp Ile Ala Arg Gly Leu Arg Tyr Leu
 145 150 155 160

 His Ser Lys Gly Val Phe His Arg Asp Leu Thr Ser Lys Asn Cys Leu
 165 170 175

 Val Arg Arg Glu Asp Arg Gly Phe Thr Ala Val Val Gly Asp Phe Gly
 180 185 190

 Leu Ala Glu Lys Ile Pro Val Tyr Arg Glu Gly Ala Arg Lys Glu Pro
 195 200 205

 Leu Ala Val Val Gly Ser Pro Tyr Trp Met Ala Pro Glu Val Leu Arg
 210 215 220

 Gly Glu Leu Tyr Asp Glu Lys Ala Asp Val Phe Ala Phe Gly Ile Val
 225 230 235 240

 Leu Cys Glu Leu Ile Ala Arg Val Pro Ala Asp Pro Asp Tyr Leu Pro
 245 250 255

 Arg Thr Glu Asp Phe Gly Leu Asp Val Pro Ala Phe Arg Thr Leu Val
 260 265 270

 Gly Asp Asp Cys Pro Leu Pro Phe Leu Leu Leu Ala Ile His Cys Cys
 275 280 285

 Asn Leu Glu Pro Ser Thr Arg Ala Pro Phe Thr Glu Ile Thr Gln His
 290 295 300

 Leu Glu Trp Ile Leu Glu Gln Leu Pro Glu Pro Ala Pro Leu Thr Arg
 305 310 315 320

 Thr Ala Leu Thr His Asn Gln Gly Ser Val Ala Arg Gly Gly Pro Ser
 325 330 335

Ala Thr Leu Pro Arg Pro Asp Pro Arg Leu Ser Arg Ser Arg Ser Asp
 340 345 350
 Leu Phe Leu Pro Pro Ser
 355

 <210> 143
 <211> 325
 <212> PRT
 <213> Homo sapiens

 <400> 143
 Thr Pro Val Gln Asn Leu Glu Gln Ser Tyr Met Pro Pro Asp Ser Ser
 1 5 10 15

 Ser Pro Glu Asn Lys Ser Leu Glu Val Ser Asp Thr Arg Phe His Ser
 20 25 30

 Phe Ser Phe Tyr Glu Leu Lys Asn Val Thr Asn Asn Phe Asp Glu Arg
 35 40 45

 Pro Ile Ser Val Gly Gly Asn Lys Met Gly Glu Gly Phe Gly Val
 50 55 60

 Val Tyr Lys Gly Tyr Val Asn Asn Thr Thr Val Ala Val Lys Lys Leu
 65 70 75 80

 Ala Ala Met Val Asp Ile Thr Thr Glu Glu Leu Lys Gln Gln Phe Asp
 85 90 95

 Gln Glu Ile Lys Val Met Ala Lys Cys Gln His Glu Asn Leu Val Glu
 100 105 110

 Leu Leu Gly Phe Ser Ser Asp Gly Asp Asp Leu Cys Leu Val Tyr Val
 115 120 125

 Tyr Met Pro Asn Gly Ser Leu Leu Asp Arg Leu Ser Cys Leu Asp Gly
 130 135 140

 Thr Pro Pro Leu Ser Trp His Met Arg Cys Lys Ile Ala Gln Gly Ala
 145 150 155 160

 Ala Asn Gly Ile Asn Phe Leu His Glu Asn His His Ile His Arg Asp
 165 170 175

 Ile Lys Ser Ala Asn Ile Leu Leu Asp Glu Ala Phe Thr Ala Lys Ile
 180 185 190

 Ser Asp Phe Gly Leu Ala Arg Ala Ser Glu Lys Phe Ala Gln Thr Val
 195 200 205

 Met Thr Ser Arg Ile Val Gly Thr Thr Ala Tyr Met Ala Pro Glu Ala
 210 215 220

 Leu Arg Gly Glu Ile Thr Pro Lys Ser Asp Ile Tyr Ser Phe Gly Val
 225 230 235 240

180

Val Leu Leu Glu Ile Ile Thr Gly Leu Pro Ala Val Asp Glu His Arg
245 250 255

Glu Pro Gln Leu Leu Leu Asp Ile Lys Glu Glu Ile Glu Asp Glu Glu
260 265 270

Lys Thr Ile Glu Asp Tyr Ile Asp Lys Lys Met Asn Asp Ala Asp Ser
275 280 285

Thr Ser Val Glu Ala Met Tyr Ser Gly Ala Ser Gln Cys Arg His Glu
290 295 300

Lys Lys Asn Lys Ser Pro Asp Ile Lys Lys Val His Gln Leu Leu Gln
305 310 315 320

Glu Met Thr Ala Ser
325

<210> 144

<211> 402

<212> PRT

<213> Homo sapiens

<400> 144

Pro Ser Pro Ala Ser Leu Trp Pro Pro Pro Pro Ser Pro Ala Pro Ser
1 5 10 15

Ser Thr Lys Pro Gly Pro Glu Ser Ser Val Ser Leu Leu Gln Gly Ala
20 25 30

Arg Pro Ser Pro Phe Cys Trp Pro Leu Cys Glu Ile Ser Arg Gly Thr
35 40 45

His Asn Phe Ser Glu Glu Leu Lys Ile Gly Glu Gly Phe Gly Cys
50 55 60

Val Tyr Arg Ala Val Met Arg Asn Thr Val Tyr Ala Val Lys Arg Leu
65 70 75 80

Lys Glu Asn Ala Asp Leu Glu Trp Thr Ala Val Lys Gln Ser Phe Leu
85 90 95

Thr Glu Val Glu Gln Leu Ser Arg Phe Arg His Pro Asn Ile Val Asp
100 105 110

Phe Ala Gly Tyr Cys Ala Gln Asn Gly Phe Tyr Cys Leu Val Tyr Gly
115 120 125

Phe Leu Pro Asn Gly Ser Leu Glu Asp Arg Leu His Cys Gln Thr Gln
130 135 140

Ala Cys Pro Pro Leu Ser Trp Pro Gln Arg Leu Asp Ile Leu Leu Gly
145 150 155 160

Thr Ala Arg Ala Ile Gln Phe Leu His Gln Asp Ser Pro Ser Leu Ile
165 170 175

His Gly Asp Ile Lys Ser Ser Asn Val Leu Leu Asp Glu Arg Leu Thr
 180 185 190

Pro Lys Leu Gly Asp Phe Gly Leu Ala Arg Phe Ser Arg Phe Ala Gly
 195 200 205

Ser Ser Pro Ser Gln Ser Ser Met Val Ala Arg Thr Gln Thr Val Arg
 210 215 220

Gly Thr Leu Ala Tyr Leu Pro Glu Glu Tyr Ile Lys Thr Gly Arg Leu
 225 230 235 240

Ala Val Asp Thr Asp Thr Phe Ser Phe Gly Val Val Val Leu Glu Thr
 245 250 255

Leu Ala Gly Gln Arg Ala Val Lys Thr His Gly Ala Arg Thr Lys Tyr
 260 265 270

Leu Lys Asp Leu Val Glu Glu Ala Glu Glu Ala Gly Val Ala Leu
 275 280 285

Arg Ser Thr Gln Ser Thr Leu Gln Ala Gly Leu Ala Ala Asp Ala Trp
 290 295 300

Ala Ala Pro Ile Ala Met Gln Ile Tyr Lys Lys His Leu Asp Pro Arg
 305 310 315 320

Pro Gly Pro Cys Pro Pro Glu Leu Gly Leu Gly Leu Gly Gln Leu Ala
 325 330 335

Cys Cys Cys Leu His Arg Arg Ala Lys Arg Arg Pro Pro Met Thr Gln
 340 345 350

Val Tyr Glu Arg Leu Glu Lys Leu Gln Ala Val Val Ala Gly Val Pro
 355 360 365

Gly His Leu Glu Ala Ala Ser Cys Ile Pro Pro Ser Pro Gln Glu Asn
 370 375 380

Ser Tyr Val Ser Ser Thr Gly Arg Ala His Ser Gly Ala Ala Pro Trp
 385 390 395 400

Gln Pro

<210> 145
 <211> 329
 <212> PRT
 <213> Homo sapiens

<400> 145
 Met Glu Arg Pro Pro Gly Leu Arg Pro Gly Ala Gly Gly Pro Trp Glu
 1 5 10 15

Met Arg Glu Arg Leu Gly Thr Gly Gly Phe Gly Asn Val Cys Leu Tyr
 20 25 30

Gln His Arg Glu Leu Asp Leu Lys Ile Ala Ile Lys Ser Cys Arg Leu
 35 40 45

 Glu Leu Ser Thr Lys Asn Arg Glu Arg Trp Cys His Glu Ile Gln Ile
 50 55 60

 Met Lys Lys Leu Asn His Ala Asn Val Val Lys Ala Cys Asp Val Pro
 65 70 75 80

 Glu Glu Leu Asn Ile Leu Ile His Asp Val Pro Leu Leu Ala Met Glu
 85 90 95

 Tyr Cys Ser Gly Gly Asp Leu Arg Lys Leu Leu Asn Lys Pro Glu Asn
 100 105 110

 Cys Cys Gly Leu Lys Glu Ser Gln Ile Leu Ser Leu Leu Ser Asp Ile
 115 120 125

 Gly Ser Gly Ile Arg Tyr Leu His Glu Asn Lys Ile Ile His Arg Asp
 130 135 140

 Leu Lys Pro Glu Asn Ile Val Leu Gln Asp Val Gly Gly Lys Ile Ile
 145 150 155 160

 His Lys Ile Ile Asp Leu Gly Tyr Ala Lys Asp Val Asp Gln Gly Ser
 165 170 175

 Leu Cys Thr Ser Phe Val Gly Thr Leu Gln Tyr Leu Ala Pro Glu Leu
 180 185 190

 Phe Glu Asn Lys Pro Tyr Thr Ala Thr Val Asp Tyr Trp Ser Phe Gly
 195 200 205

 Thr Met Val Phe Glu Cys Ile Ala Gly Tyr Arg Pro Phe Leu His His
 210 215 220

 Leu Gln Pro Phe Thr Trp His Glu Lys Ile Lys Lys Lys Asp Pro Lys
 225 230 235 240

 Cys Ile Phe Ala Cys Glu Glu Met Ser Gly Glu Val Arg Phe Ser Ser
 245 250 255

 His Leu Pro Gln Pro Asn Ser Leu Cys Ser Leu Ile Val Glu Pro Met
 260 265 270

 Glu Asn Trp Leu Gln Leu Met Leu Asn Trp Asp Pro Gln Gln Arg Gly
 275 280 285

 Gly Pro Val Asp Leu Thr Leu Lys Gln Pro Arg Cys Phe Val Leu Met
 290 295 300

 Asp His Ile Leu Asn Leu Lys Ile Val His Ile Leu Asn Met Thr Ser
 305 310 315 320

 Ala Lys Ile Ile Ser Phe Leu Leu Pro
 325

<210> 146
<211> 347
<212> PRT
<213> Homo sapiens

<400> 146
Met Gln Ser Thr Ala Asn Tyr Leu Trp His Thr Asp Asp Leu Leu Gly
1 5 10 15

Gln Gly Ala Thr Ala Ser Val Tyr Lys Ala Arg Asn Lys Lys Ser Gly
20 25 30

Glu Leu Val Ala Val Lys Val Phe Asn Thr Thr Ser Tyr Leu Arg Pro
35 40 45

Arg Glu Val Gln Val Arg Glu Phe Glu Val Leu Arg Lys Leu Asn His
50 55 60

Gln Asn Ile Val Lys Leu Phe Ala Val Glu Glu Thr Gly Gly Ser Arg
65 70 75 80

Gln Lys Val Leu Val Met Glu Tyr Cys Ser Ser Gly Ser Leu Leu Ser
85 90 95

Val Leu Glu Ser Pro Glu Asn Ala Phe Gly Leu Pro Glu Asp Glu Phe
100 105 110

Leu Val Val Leu Arg Cys Val Val Ala Gly Met Asn His Leu Arg Glu
115 120 125

Asn Gly Ile Val His Arg Asp Ile Lys Pro Gly Asn Ile Met Arg Leu
130 135 140

Val Gly Glu Glu Gly Gln Ser Ile Tyr Lys Leu Thr Asp Phe Gly Ala
145 150 155 160

Ala Arg Glu Leu Asp Asp Asp Glu Lys Phe Val Ser Val Tyr Gly Thr
165 170 175

Glu Glu Tyr Leu His Pro Asp Met Tyr Glu Arg Ala Val Leu Arg Lys
180 185 190

Pro Gln Gln Lys Ala Phe Gly Val Thr Val Asp Leu Trp Ser Ile Gly
195 200 205

Val Thr Leu Tyr His Ala Ala Thr Gly Ser Leu Pro Phe Ile Pro Phe
210 215 220

Gly Gly Pro Arg Arg Asn Lys Glu Ile Met Tyr Arg Ile Thr Thr Glu
225 230 235 240

Lys Pro Ala Gly Ala Ile Ala Gly Ala Gln Arg Arg Glu Asn Gly Pro
245 250 255

Leu Glu Trp Ser Tyr Thr Leu Pro Ile Thr Cys Gln Leu Ser Leu Gly
260 265 270

Leu Gln Ser Gln Leu Val Pro Ile Leu Ala Asn Ile Leu Glu Val Glu
 275 280 285

Gln Ala Lys Cys Trp Gly Phe Asp Gln Phe Phe Ala Glu Thr Ser Asp
 290 295 300

Ile Leu Gln Arg Val Val His Val Phe Ser Leu Ser Gln Ala Val
 305 310 315 320

Leu His His Ile Tyr Ile His Ala His Asn Thr Ile Ala Ile Phe Gln
 325 330 335

Glu Ala Val His Lys Gln Thr Ser Val Ala Pro
 340 345

<210> 147

<211> 373

<212> PRT

<213> Homo sapiens

<400> 147

Ile	Asp	Phe	Thr	Pro	Pro	Ala	Glu	Asp	Thr	Pro	Ser	Val	Gln	Ser	Pro
1				5					10				15		

Ala Glu Val Phe Thr Leu Ser Val Pro Asn Ile Ser Leu Pro Ala Pro
 20 25 30

Ser Gln Phe Gln Pro Ser Val Glu Gly Leu Lys Ser Gln Val Ala Arg
 35 40 45

His Ser Leu Asn Tyr Ile Gln Glu Ile Gly Asn Gly Trp Phe Gly Lys
 50 55 60

Val Leu Leu Gly Glu Ile Tyr Thr Gly Thr Ser Val Ala Arg Val Ile
 65 70 75 80

Val Lys Glu Leu Lys Ala Ser Ala Asn Pro Lys Glu Gln Asp Thr Phe
 85 90 95

Leu Lys Asn Gly Glu Pro Tyr Tyr Ile Leu Gln His Pro Asn Ile Leu
 100 105 110

Gln Cys Val Gly Gln Cys Val Glu Ala Ile Pro Tyr Leu Leu Val Phe
 115 120 125

Glu Phe Cys Asp Leu Gly Asp Leu Lys Ala Tyr Leu Arg Ser Glu Gln
 130 135 140

Glu His Met Arg Gly Asp Ser Gln Thr Met Leu Leu Gln Arg Met Ala
 145 150 155 160

Cys Glu Val Ala Ala Gly Leu Ala Ala Met His Lys Leu His Phe Leu
 165 170 175

His Ser Asp Leu Ala Leu Arg Asn Cys Phe Leu Thr Ser Asp Leu Asn
 180 185 190

Val Lys Val Gly Asp Tyr Gly Ile Gly Phe Ser Arg Tyr Lys Glu Asp
 195 200 205
 Tyr Ile Glu Thr Asp Asp Lys Lys Val Phe Pro Leu Arg Trp Thr Ala
 210 215 220
 Pro Glu Leu Val Thr Ser Phe Gln Asp Arg Leu Leu Thr Ala Asp Gln
 225 230 235 240
 Thr Lys Tyr Ser Asn Ile Trp Ser Leu Gly Val Thr Leu Trp Glu Leu
 245 250 255
 Phe Asp Asn Ala Ala Gln Pro Tyr Ser Asn Leu Ser Asn Leu Asp Val
 260 265 270
 Leu Asn Gln Val Ile Arg Glu Arg Asp Thr Lys Leu Pro Lys Pro Gln
 275 280 285
 Leu Glu Gln Pro Tyr Ser Asp Arg Trp Tyr Glu Val Leu Gln Phe Cys
 290 295 300
 Trp Leu Ser Pro Glu Lys Arg Pro Ala Ala Glu Asp Val His Arg Leu
 305 310 315 320
 Leu Thr Tyr Leu Arg Leu Gln Ser Gln Arg Asp Ser Glu Val Asp Phe
 325 330 335
 Glu Gln Gln Trp Asn Ala Leu Lys Pro Asn Thr Asn Ser Arg Asp Ser
 340 345 350
 Ser Asn Asn Ala Ala Phe Pro Ile Leu Asp His Phe Ala Arg Asp Arg
 355 360 365
 Leu Gly Arg Glu Met
 370

<210> 148
 <211> 321
 <212> PRT
 <213> Homo sapiens

<400> 148
 Met Pro Ser Arg Ala Glu Asp Tyr Glu Val Leu Tyr Thr Ile Gly Thr
 1 5 10 15
 Gly Ser Tyr Gly Arg Cys Gln Lys Ile Arg Arg Lys Ser Asp Gly Lys
 20 25 30
 Ile Leu Val Trp Lys Glu Leu Asp Tyr Gly Ser Met Thr Glu Ala Glu
 35 40 45
 Lys Gln Met Leu Val Ser Glu Val Asn Leu Leu Arg Glu Leu Lys His
 50 55 60
 Pro Asn Ile Val Arg Tyr Tyr Asp Arg Ile Ile Asp Arg Thr Asn Thr
 65 70 75 80

Thr Leu Tyr Ile Val Met Glu Tyr Cys Glu Gly Gly Asp Leu Ala Ser
 85 90 95
 Val Ile Thr Lys Gly Thr Lys Glu Arg Gln Tyr Leu Asp Glu Glu Phe
 100 105 110
 Val Leu Arg Val Met Thr Gln Leu Thr Leu Ala Leu Lys Glu Cys His
 115 120 125
 Arg Arg Ser Asp Gly Gly His Thr Val Leu His Arg Asp Leu Lys Pro
 130 135 140
 Ala Asn Val Phe Leu Asp Gly Lys Gln Asn Val Lys Leu Gly Asp Phe
 145 150 155 160
 Gly Leu Ala Arg Ile Leu Asn His Asp Thr Ser Phe Ala Lys Thr Phe
 165 170 175
 Val Gly Thr Pro Tyr Tyr Met Ser Pro Glu Gln Met Asn Arg Met Ser
 180 185 190
 Tyr Asn Glu Lys Ser Asp Ile Trp Ser Leu Gly Cys Leu Leu Tyr Glu.
 195 200 205
 Leu Cys Ala Leu Met Pro Pro Phe Thr Ala Phe Ser Gln Lys Glu Leu
 210 215 220
 Ala Gly Lys Ile Arg Glu Gly Lys Phe Arg Arg Ile Pro Tyr Arg Tyr
 225 230 235 240
 Ser Asp Glu Leu Asn Glu Ile Ile Thr Arg Met Leu Asn Leu Lys Asp
 245 250 255
 Tyr His Arg Pro Ser Val Glu Glu Ile Leu Glu Asn Pro Leu Ile Ala
 260 265 270
 Asp Leu Val Ala Asp Glu Gln Arg Arg Asn Leu Glu Arg Arg Gly Arg
 275 280 285
 Gln Leu Gly Glu Pro Glu Lys Ser Gln Asp Ser Ser Pro Val Leu Ser
 290 295 300
 Glu Leu Lys Leu Lys Glu Ile Gln Leu Gln Glu Arg Glu Arg Ala Leu
 305 310 315 320
 Lys

<210> 149
 <211> 335
 <212> PRT
 <213> Homo sapiens

<400> 149
 Ser Asn Ser Asp Ser Leu Asn Ser Ser Ser Leu Leu Met Asn Gly Leu
 1 5 10 15

Arg Asn Asn Gln Arg Lys Ala Lys Arg Ser Leu Ala Pro Arg Phe Asp
 20 25 30

Leu Pro Asp Met Lys Glu Thr Lys Tyr Thr Val Asp Lys Arg Phe Gly
 35 40 45

Met Asp Phe Lys Glu Ile Glu Leu Ile Gly Ser Gly Gly Phe Gly Gln
 50 55 60

Val Phe Lys Ala Lys His Arg Ile Asp Gly Lys Thr Tyr Val Ile Lys
 65 70 75 80

Arg Val Lys Tyr Asn Asn Glu Lys Ala Glu Arg Glu Val Lys Ala Leu
 85 90 95

Ala Lys Leu Asp His Val Asn Ile Val His Tyr Asn Gly Cys Trp Asp
 100 105 110

Gly Phe Asp Tyr Asp Pro Glu Thr Ser Asp Asp Ser Leu Glu Ser Ser
 115 120 125

Asp Tyr Asp Pro Glu Asn Ser Lys Asn Ser Ser Arg Ser Lys Thr Lys
 130 135 140

Cys Leu Phe Ile Gln Met Glu Phe Cys Asp Lys Gly Thr Leu Glu Gln
 145 150 155 160

Trp Ile Glu Lys Arg Arg Gly Glu Lys Leu Asp Lys Val Leu Ala Leu
 165 170 175

Glu Leu Phe Glu Gln Ile Thr Lys Gly Val Asp Tyr Ile His Ser Lys
 180 185 190

Lys Leu Ile His Arg Asp Leu Lys Pro Ser Asn Ile Phe Leu Val Asp
 195 200 205

Thr Lys Gln Val Lys Ile Gly Asp Phe Gly Leu Val Thr Ser Leu Lys
 210 215 220

Asn Asp Gly Lys Arg Thr Arg Ser Lys Gly Thr Leu Arg Tyr Met Ser
 225 230 235 240

Pro Glu Gln Ile Ser Ser Gln Asp Tyr Gly Lys Glu Val Asp Leu Tyr
 245 250 255

Ala Leu Gly Leu Ile Leu Ala Glu Leu Leu His Val Cys Asp Thr Ala
 260 265 270

Phe Glu Thr Ser Lys Phe Phe Thr Asp Leu Arg Asp Gly Ile Ile Ser
 275 280 285

Asp Ile Phe Asp Lys Lys Glu Lys Thr Leu Leu Gln Lys Leu Leu Ser
 290 295 300

Lys Lys Pro Glu Asp Arg Pro Asn Thr Ser Glu Ile Leu Arg Thr Leu
 305 310 315 320

Thr Val Trp Lys Lys Ser Pro Glu Lys Asn Glu Arg His Thr Cys
 325 330 335

<210> 150
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 150
 Met Leu Leu Ser Lys Ile Asn Ser Leu Ala His Leu Arg Ala Ala Pro
 1 5 10 15

Cys Asn Asp Leu His Ala Thr Lys Leu Ala Pro Gly Lys Glu Lys Glu
 20 25 30

Pro Leu Glu Ser Gln Tyr Gln Val Gly Pro Leu Leu Gly Ser Gly Gly
 35 40 45

Phe Gly Ser Val Tyr Ser Gly Ile Arg Val Ser Asp Asn Leu Pro Val
 50 55 60

Ala Ile Lys His Val Glu Lys Asp Arg Ile Ser Asp Trp Gly Glu Leu
 65 70 75 80

Pro Asn Gly Thr Arg Val Pro Met Glu Val Val Leu Leu Lys Lys Val
 85 90 95

Ser Ser Gly Phe Ser Gly Val Ile Arg Leu Leu Asp Trp Phe Glu Arg
 100 105 110

Pro Asp Ser Phe Val Leu Ile Leu Glu Arg Pro Glu Pro Val Gln Asp
 115 120 125

Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu Gln Glu Glu Leu Ala
 130 135 140

Arg Ser Phe Phe Trp Gln Val Leu Glu Ala Val Arg His Cys His Asn
 145 150 155 160

Cys Gly Val Leu His Arg Asp Ile Lys Asp Glu Asn Ile Leu Ile Asp
 165 170 175

Leu Asn Arg Gly Glu Leu Lys Leu Ile Asp Phe Gly Ser Gly Ala Leu
 180 185 190

Leu Lys Asp Thr Val Tyr Thr Asp Phe Gly Thr Arg Val Tyr Ser
 195 200 205

Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly Arg Ser Ala Ala
 210 215 220

Val Trp Ser Leu Gly Ile Leu Leu Tyr Asp Met Val Cys Gly Asp Ile
 225 230 235 240

Pro Phe Glu His Asp Glu Glu Ile Ile Arg Gly Gln Val Phe Phe Arg
 245 250 255

Gln Arg Val Ser Ser Glu Cys Gln His Leu Ile Arg Trp Cys Leu Ala
 260 265 270
 Leu Arg Pro Ser Asp Arg Pro Thr Phe Glu Glu Ile Gln Asn His Pro
 275 280 285
 Trp Met Gln Asp Val Leu Leu Pro Gln Glu Thr Ala Glu Ile His Leu
 290 295 300
 His Ser Leu Ser Pro Gly Pro Ser Lys
 305 310

<210> 151
 <211> 361
 <212> PRT
 <213> Homo sapiens

<400> 151
 Arg Leu Gly His Leu Lys Lys Glu Glu Ala Glu Ile Gln Ala Glu Leu
 1 5 10 15
 Glu Arg Leu Glu Arg Val Arg Asn Leu His Ile Arg Glu Leu Lys Arg
 20 25 30
 Ile Asn Asn Glu Asp Asn Ser Gln Phe Lys Asp His Pro Thr Leu Asn
 35 40 45
 Glu Arg Tyr Leu Leu Leu His Leu Leu Gly Arg Gly Gly Phe Ser Glu
 50 55 60
 Val Tyr Lys Ala Phe Asp Leu Tyr Glu Gln Arg Tyr Ala Ala Val Lys
 65 70 75 80
 Ile His Gln Leu Asn Lys Ser Trp Arg Asp Glu Lys Lys Glu Asn Tyr
 85 90 95
 His Lys His Ala Cys Arg Glu Tyr Arg Ile His Lys Glu Leu Asp His
 100 105 110
 Pro Arg Ile Val Lys Leu Tyr Asp Tyr Phe Ser Leu Asp Thr Asp Thr
 115 120 125
 Phe Cys Thr Val Leu Glu Tyr Cys Glu Gly Asn Asp Leu Asp Phe Tyr
 130 135 140
 Leu Lys Gln His Lys Leu Met Ser Glu Lys Glu Ala Arg Ser Ile Val
 145 150 155 160
 Met Gln Ile Val Asn Ala Leu Arg Tyr Leu Asn Glu Ile Lys Pro Pro
 165 170 175
 Ile Ile His Tyr Asp Leu Lys Pro Gly Asn Ile Leu Leu Val Asp Gly
 180 185 190
 Thr Ala Cys Gly Glu Ile Lys Ile Thr Asp Phe Gly Leu Ser Lys Ile
 195 200 205

190

Met Asp Asp Asp Ser Tyr Gly Val Asp Gly Met Asp Leu Thr Ser Gln
210 215 220

Gly Ala Gly Thr Tyr Trp Tyr Leu Pro Pro Glu Cys Phe Val Val Gly
225 230 235 240

Lys Glu Pro Pro Lys Ile Ser Asn Lys Val Asp Val Trp Ser Val Gly
245 250 255

Val Ile Phe Phe Gln Cys Leu Tyr Gly Arg Lys Pro Phe Gly His Asn
260 265 270

Gln Ser Gln Gln Asp Ile Leu Gln Glu Asn Thr Ile Leu Lys Ala Thr
275 280 285

Glu Val Gln Phe Pro Val Lys Pro Val Val Ser Ser Glu Ala Lys Ala
290 295 300

Phe Ile Arg Arg Cys Leu Ala Tyr Arg Lys Glu Asp Arg Phe Asp Val
305 310 315 320

His Gln Leu Ala Asn Asp Pro Tyr Leu Leu Pro His Met Arg Arg Ser
325 330 335

Asn Ser Ser Gly Asn Leu His Met Ala Gly Leu Thr Ala Ser Pro Thr
340 345 350

Pro Pro Ser Ser Ser Ile Ile Thr Tyr
355 360

<210> 152

<211> 359

<212> PRT

<213> Homo sapiens

<400> 152

Leu Val Gly Ser Lys Glu Glu Pro Pro Pro Ala Arg Ser Gly Ser Gly
1 5 10 15

Gly Gly Ser Ala Lys Glu Pro Gln Glu Glu Arg Ser Gln Gln Asp
20 25 30

Asp Ile Glu Glu Leu Glu Thr Lys Ala Val Gly Met Ser Asn Asp Gly
35 40 45

Arg Phe Leu Lys Phe Asp Ile Glu Ile Gly Arg Gly Ser Phe Lys Thr
50 55 60

Val Tyr Lys Gly Leu Asp Thr Glu Thr Thr Val Glu Val Ala Trp Cys
65 70 75 80

Glu Leu Gln Asp Arg Lys Leu Thr Lys Ser Glu Arg Gln Arg Phe Lys
85 90 95

Glu Glu Ala Glu Met Leu Lys Gly Leu Gln His Pro Asn Ile Val Arg
100 105 110

Phe Tyr Asp Ser Trp Glu Ser Thr Val Lys Gly Lys Lys Cys Ile Val
 115 120 125
 Leu Val Thr Glu Leu Met Thr Ser Gly Thr Leu Lys Thr Tyr Leu Lys
 130 135 140
 Arg Phe Lys Val Met Lys Ile Lys Val Leu Arg Ser Trp Cys Arg Gln
 145 150 155 160
 Ile Leu Lys Gly Leu Gln Phe Leu His Thr Arg Thr Pro Pro Ile Ile
 165 170 175
 His Arg Asp Leu Lys Cys Asp Asn Ile Phe Ile Thr Gly Pro Thr Gly
 180 185 190
 Ser Val Lys Ile Gly Asp Leu Gly Leu Ala Thr Leu Lys Arg Ala Ser
 195 200 205
 Phe Ala Lys Ser Val Ile Gly Thr Pro Glu Phe Met Ala Pro Glu Met
 210 215 220
 Tyr Glu Glu Lys Tyr Asp Glu Ser Val Asp Val Tyr Ala Phe Gly Met
 225 230 235 240
 Cys Met Leu Glu Met Ala Thr Ser Glu Tyr Pro Tyr Ser Glu Cys Gln
 245 250 255
 Asn Ala Ala Gln Ile Tyr Arg Arg Val Thr Ser Gly Val Lys Pro Ala
 260 265 270
 Ser Phe Asp Lys Val Ala Ile Pro Glu Val Lys Glu Ile Ile Glu Gly
 275 280 285
 Cys Ile Arg Gln Asn Lys Asp Glu Arg Tyr Ser Ile Lys Asp Leu Leu
 290 295 300
 Asn His Ala Phe Phe Gln Glu Glu Thr Gly Val Arg Val Glu Leu Ala
 305 310 315 320
 Glu Glu Asp Asp Gly Glu Lys Ile Ala Ile Lys Leu Trp Leu Arg Ile
 325 330 335
 Glu Asp Ile Lys Lys Leu Lys Gly Lys Tyr Lys Asp Asn Glu Ala Ile
 340 345 350
 Glu Phe Ser Phe Asp Leu Glu
 355

<210> 153
 <211> 350
 <212> PRT
 <213> Homo sapiens

<400> 153
 Ser Ile Pro Ile Ser Arg Leu Phe Pro Pro Arg Thr Pro Gly Trp His
 1 5 10 15

Gln Leu Gln Pro Arg Arg Val Ser Phe Arg Gly Glu Ala Ser Glu Thr
 20 25 30

Leu Gln Ser Pro Gly Tyr Asp Pro Ser Arg Pro Glu Ser Phe Phe Gln
 35 40 45

Gln Ser Phe Gln Arg Leu Ser Arg Leu Gly His Gly Ser Tyr Gly Glu
 50 55 60

Val Phe Lys Val Arg Ser Lys Glu Asp Gly Arg Leu Tyr Ala Val Lys
 65 70 75 80

Arg Ser Met Ser Pro Phe Arg Gly Pro Lys Asp Arg Ala Arg Lys Leu
 85 90 95

Ala Glu Val Gly Ser His Glu Lys Val Gly Gln His Pro Cys Cys Val
 100 105 110

Arg Leu Glu Gln Ala Trp Glu Glu Gly Ile Leu Tyr Leu Gln Thr
 115 120 125

Glu Leu Cys Gly Pro Ser Leu Gln Gln His Cys Glu Ala Trp Gly Ala
 130 135 140

Ser Leu Pro Glu Ala Gln Val Trp Gly Tyr Leu Arg Asp Thr Leu Leu
 145 150 155 160

Ala Leu Ala His Leu His Ser Gln Gly Leu Val His Leu Asp Val Lys
 165 170 175

Pro Ala Asn Ile Phe Leu Gly Pro Arg Gly Arg Cys Lys Leu Gly Asp
 180 185 190

Phe Gly Leu Leu Val Glu Leu Gly Thr Ala Gly Ala Gly Glu Val Gln
 195 200 205

Glu Gly Asp Pro Arg Tyr Met Ala Pro Glu Leu Leu Gln Gly Ser Tyr
 210 215 220

Gly Thr Ala Ala Asp Val Phe Ser Leu Gly Leu Thr Ile Leu Glu Val
 225 230 235 240

Ala Cys Asn Met Glu Leu Pro His Gly Gly Glu Gly Trp Gln Gln Leu
 245 250 255

Arg Gln Gly Tyr Leu Pro Pro Glu Phe Thr Ala Gly Leu Ser Ser Glu
 260 265 270

Leu Arg Ser Val Leu Val Met Met Leu Glu Pro Asp Pro Lys Leu Arg
 275 280 285

Ala Thr Ala Glu Ala Leu Leu Ala Leu Pro Val Leu Arg Gln Pro Arg
 290 295 300

Ala Trp Gly Val Leu Trp Cys Met Ala Ala Glu Ala Leu Ser Arg Gly
 305 310 315 320

Trp Ala Leu Trp Gln Ala Leu Leu Ala Leu Leu Cys Trp Leu Trp His
 325 330 335
 Gly Leu Ala His Pro Ala Ser Trp Leu Gln Pro Leu Gly Pro
 340 345 350

<210> 154
 <211> 371
 <212> PRT
 <213> Homo sapiens

<400> 154
 Gly Gln Cys Arg Arg Arg Lys Arg Thr Tyr Trp Asn Asp Ser Cys Gly
 1 5 10 15

Glu Asp Met Glu Ala Ser Asp Tyr Glu Leu Glu Asp Glu Thr Arg Pro
 20 25 30

Ala Lys Arg Ile Thr Ile Thr Glu Ser Asn Met Lys Ser Arg Tyr Thr
 35 40 45

Thr Glu Phe His Glu Leu Glu Lys Ile Gly Ser Gly Glu Phe Gly Ser
 50 55 60

Val Phe Lys Cys Val Lys Arg Leu Asp Gly Cys Ile Tyr Ala Ile Lys
 65 70 75 80

Arg Ser Lys Lys Pro Leu Ala Gly Ser Val Asp Glu Gln Asn Ala Leu
 85 90 95

Arg Glu Val Tyr Ala His Ala Val Leu Gly Gln His Ser His Val Val
 100 105 110

Arg Tyr Phe Ser Ala Trp Ala Glu Asp Asp His Met Leu Ile Gln Asn
 115 120 125

Glu Tyr Cys Asn Gly Gly Ser Leu Ala Asp Ala Ile Ser Glu Asn Tyr
 130 135 140

Arg Ile Met Ser Tyr Phe Lys Glu Ala Glu Leu Lys Asp Leu Leu Leu
 145 150 155 160

Gln Val Gly Arg Gly Leu Arg Tyr Ile His Ser Met Ser Leu Val His
 165 170 175

Met Asp Ile Lys Pro Ser Asn Ile Phe Ile Ser Arg Thr Ser Ile Pro
 180 185 190

Asn Ala Ala Ser Glu Glu Gly Asp Glu Asp Asp Trp Ala Ser Asn Lys
 195 200 205

Val Met Phe Lys Ile Gly Asp Leu Gly His Val Thr Arg Ile Ser Ser
 210 215 220

Pro Gln Val Glu Glu Gly Asp Ser Arg Phe Leu Ala Asn Glu Val Leu
 225 230 235 240

Gln Glu Asn Tyr Thr His Leu Pro Lys Ala Asp Ile Phe Ala Leu Ala
 245 250 255

Leu Thr Val Val Cys Ala Ala Gly Ala Glu Pro Leu Pro Arg Asn Gly
 260 265 270

Asp Gln Trp His Glu Ile Arg Gln Gly Arg Leu Pro Arg Ile Pro Gln
 275 280 285

Val Leu Ser Gln Glu Phe Thr Glu Leu Leu Lys Val Met Ile His Pro
 290 295 300

Asp Pro Glu Arg Arg Pro Ser Ala Met Ala Leu Val Lys His Ser Val
 305 310 315 320

Leu Leu Ser Ala Ser Arg Lys Ser Ala Glu Gln Leu Arg Ile Glu Leu
 325 330 335

Asn Ala Glu Lys Phe Lys Asn Ser Leu Leu Gln Lys Glu Leu Lys Lys
 340 345 350

Ala Gln Met Ala Lys Ala Ala Glu Glu Arg Ala Leu Phe Thr Asp
 355 360 365

Arg Met Ala
 370

<210> 155

<211> 351

<212> PRT

<213> Homo sapiens

<400> 155

Ala Asn His Ile Ser Asn Thr Ala Lys His Phe Tyr Gly Gln Arg Pro
 1 5 10 15

Gln Glu Ser Gly Ile Leu Leu Asn Met Val Ile Thr Pro Gln Asn Gly
 20 25 30

Arg Tyr Gln Ile Asp Ser Asp Val Leu Leu Ile Pro Trp Lys Leu Thr
 35 40 45

Tyr Arg Asn Ile Gly Ser Asp Phe Ile Pro Arg Gly Ala Phe Gly Lys
 50 55 60

Val Tyr Leu Ala Gln Asp Ile Lys Thr Lys Lys Arg Met Ala Cys Lys
 65 70 75 80

Leu Ile Pro Val Asp Gln Phe Lys Pro Ser Asp Val Glu Ile Gln Ala
 85 90 95

Cys Phe Arg His Glu Asn Ile Ala Glu Leu Tyr Gly Ala Val Leu Trp
 100 105 110

Gly Glu Thr Val His Leu Phe Met Glu Ala Gly Glu Gly Ser Val
 115 120 125

Leu Glu Lys Leu Glu Ser Cys Gly Pro Met Arg Glu Phe Glu Ile Ile
 130 135 140

Trp Val Thr Lys His Val Leu Lys Gly Leu Asp Phe Leu His Ser Lys
 145 150 155 160

Lys Val Ile His His Asp Ile Lys Pro Ser Asn Ile Val Phe Met Ser
 165 170 175

Thr Lys Ala Val Leu Val Asp Phe Gly Leu Ser Val Gln Met Thr Glu
 180 185 190

Asp Val Tyr Phe Pro Lys Asp Leu Arg Gly Thr Glu Ile Tyr Met Ser
 195 200 205

Pro Glu Val Ile Leu Cys Arg Gly His Ser Thr Lys Ala Asp Ile Tyr
 210 215 220

Ser Leu Gly Ala Thr Leu Ile His Met Gln Thr Gly Thr Pro Pro Trp
 225 230 235 240

Val Lys Arg Tyr Pro Arg Ser Ala Tyr Pro Ser Tyr Leu Tyr Ile Ile
 245 250 255

His Lys Gln Ala Pro Pro Leu Glu Asp Ile Ala Asp Asp Cys Ser Pro
 260 265 270

Gly Met Arg Glu Leu Ile Glu Ala Ser Leu Glu Arg Asn Pro Asn His
 275 280 285

Arg Pro Arg Ala Ala Asp Leu Leu Lys His Glu Ala Leu Asn Pro Pro
 290 295 300

Arg Glu Asp Gln Pro Arg Cys Gln Ser Leu Asp Ser Ala Leu Leu Glu
 305 310 315 320

Arg Lys Arg Leu Leu Ser Arg Lys Glu Leu Glu Leu Pro Glu Asn Ile
 325 330 335

Ala Asp Ser Ser Cys Thr Gly Ser Thr Glu Glu Ser Glu Met Leu
 340 345 350

<210> 156
 <211> 343
 <212> PRT
 <213> Homo sapiens

<400> 156
 Thr Asp Asn Ile Ser Phe Met Leu Lys Arg Cys Cys Gln Pro Lys Pro
 1 5 10 15

Arg Glu Ile Ser Asn Leu Leu Val Ala Thr Lys Lys Ala Gln Glu Trp
 20 25 30

Gln Pro Val Tyr Pro Met Ser Gln Leu Ser Phe Asp Arg Ile Leu Lys
 35 40 45

Lys Asp Leu Val Gln Gly Glu His Leu Gly Arg Gly Thr Arg Thr His
 50 55 60

Ile Tyr Ser Gly Thr Leu Met Asp Tyr Lys Asp Asp Glu Gly Thr Ser
 65 70 75 80

Glu Glu Lys Lys Ile Lys Val Ile Leu Lys Val Leu Asp Pro Ser His
 85 90 95

Arg Asp Ile Ser Leu Ala Phe Phe Glu Ala Ala Ser Met Met Arg Gln
 100 105 110

Val Ser His Lys His Ile Val Tyr Leu Tyr Gly Val Cys Val Arg Asp
 115 120 125

Val Glu Asn Ile Met Val Glu Glu Phe Val Glu Gly Gly Pro Leu Asp
 130 135 140

Leu Phe Met His Arg Lys Ser Asp Val Leu Thr Thr Pro Trp Lys Phe
 145 150 155 160

Lys Val Ala Lys Gln Leu Ala Ser Ala Leu Ser Tyr Leu Glu Asp Lys
 165 170 175

Asp Leu Val His Gly Asn Val Cys Thr Lys Asn Leu Leu Leu Ala Arg
 180 185 190

Glu Gly Ile Asp Ser Glu Cys Gly Pro Phe Ile Lys Leu Ser Asp Pro
 195 200 205

Gly Ile Pro Ile Thr Val Leu Ser Arg Gln Glu Cys Ile Glu Arg Ile
 210 215 220

Pro Trp Ile Ala Pro Glu Cys Val Glu Asp Ser Lys Asn Leu Ser Val
 225 230 235 240

Ala Ala Asp Lys Trp Ser Phe Gly Thr Thr Leu Trp Glu Ile Cys Tyr
 245 250 255

Asn Gly Glu Ile Pro Leu Lys Asp Lys Thr Leu Ile Glu Lys Glu Arg
 260 265 270

Phe Tyr Glu Ser Arg Cys Arg Pro Val Thr Pro Ser Cys Lys Glu Leu
 275 280 285

Ala Asp Leu Met Thr Arg Cys Met Asn Tyr Asp Pro Asn Gln Arg Pro
 290 295 300

Phe Phe Arg Ala Ile Met Arg Asp Ile Asn Lys Leu Glu Glu Gln Asn
 305 310 315 320

Pro Asp Ile Val Ser Arg Lys Lys Asn Gln Pro Thr Glu Val Asp Pro
 325 330 335

Thr His Phe Glu Lys Arg Phe
 340

<210> 157
 <211> 367
 <212> PRT
 <213> Homo sapiens

 <400> 157
 Phe Pro Pro Ala Cys Gln Leu Ser Thr Pro Tyr Gly Gln Pro Ala Cys
 1 5 10 15

 Phe Gln Gln Gln His Gln Ile Leu Ala Thr Pro Leu Gln Asn Leu
 20 25 30

 Gln Val Leu Ala Ser Ser Ala Asn Glu Cys Ile Ser Val Lys Gly
 35 40 45

 Arg Ile Tyr Ser Ile Leu Lys Gln Ile Gly Ser Gly Gly Ser Ser Lys
 50 55 60

 Val Phe Gln Val Leu Asn Glu Lys Lys Gln Ile Tyr Ala Ile Lys Tyr
 65 70 75 80

 Val Asn Leu Glu Glu Ala Asp Asn Gln Thr Leu Asp Ser Tyr Arg Asn
 85 90 95

 Glu Ile Ala Tyr Leu Asn Lys Leu Gln Gln His Ser Asp Lys Ile Ile
 100 105 110

 Arg Leu Tyr Asp Tyr Glu Ile Thr Asp Gln Tyr Ile Tyr Met Val Met
 115 120 125

 Glu Cys Gly Asn Ile Asp Leu Asn Ser Trp Leu Lys Lys Lys Ser
 130 135 140

 Ile Asp Pro Trp Glu Arg Lys Ser Tyr Trp Lys Asn Met Leu Glu Ala
 145 150 155 160

 Val His Thr Ile His Gln His Gly Ile Val His Ser Asp Leu Lys Pro
 165 170 175

 Ala Asn Phe Leu Ile Val Asp Gly Met Leu Lys Leu Ile Asp Phe Gly
 180 185 190

 Ile Ala Asn Gln Met Gln Pro Asp Thr Thr Ser Val Val Lys Asp Ser
 195 200 205

 Gln Val Gly Thr Val Asn Tyr Met Pro Pro Glu Ala Ile Lys Asp Met
 210 215 220

 Ser Ser Ser Arg Glu Asn Gly Lys Ser Lys Ser Lys Ile Ser Pro Lys
 225 230 235 240

 Ser Asp Val Trp Ser Leu Gly Cys Ile Leu Tyr Tyr Met Thr Tyr Gly
 245 250 255

 Lys Thr Pro Phe Gln Gln Ile Ile Asn Gln Ile Ser Lys Leu His Ala
 260 265 270

Ile	Ile	Asp	Pro	Asn	His	Glu	Ile	Glu	Phe	Pro	Asp	Ile	Pro	Glu	Lys
275						280					285				
Asp	Leu	Gln	Asp	Val	Leu	Lys	Cys	Cys	Leu	Lys	Arg	Asp	Pro	Lys	Gln
290					295					300					
Arg	Ile	Ser	Ile	Pro	Glu	Leu	Leu	Ala	His	Pro	Tyr	Val	Gln	Ile	Gln
305					310				315			320			
Thr	His	Pro	Val	Asn	Gln	Met	Ala	Lys	Gly	Thr	Thr	Glu	Glu	Met	Lys
					325			330				335			
Tyr	Val	Leu	Gly	Gln	Leu	Val	Gly	Leu	Asn	Ser	Pro	Asn	Ser	Ile	Leu
					340			345				350			
Lys	Ala	Ala	Lys	Thr	Leu	Tyr	Glu	His	Tyr	Ser	Gly	Gly	Glu	Ser	
					355			360			365				

<210> 158

<211> 337

<212> PRT

<213> Homo sapiens

<400> 158

Tyr	Leu	Arg	Ser	Glu	Phe	Ser	Pro	Ser	Val	Asp	Ala	Arg	Pro	Cys	Ser
1				5					10				15		

Ser	Pro	Ser	Glu	Leu	Pro	Ala	Lys	Leu	Leu	Leu	Gly	Ala	Thr	Leu	Pro
				20				25				30			

Arg	Ala	Pro	Arg	Leu	Pro	Arg	Arg	Leu	Ala	Trp	Cys	Ser	Ile	Asp	Trp
				35			40				45				

Glu	Gln	Val	Cys	Leu	Leu	Gln	Arg	Leu	Gly	Ala	Gly	Gly	Phe	Gly	Ser
				50		55				60					

Val	Tyr	Lys	Ala	Thr	Tyr	Arg	Gly	Val	Pro	Val	Ala	Ile	Lys	Gln	Val
				65		70			75			80			

Asn	Lys	Cys	Thr	Lys	Asn	Arg	Leu	Ala	Ser	Arg	Arg	Ser	Phe	Trp	Ala
				85				90			95				

Glu	Leu	Asn	Val	Ala	Arg	Leu	Arg	His	Asp	Asn	Ile	Val	Arg	Val	Val
				100			105				110				

Ala	Ala	Ser	Thr	Arg	Thr	Pro	Ala	Gly	Ser	Asn	Ser	Leu	Gly	Thr	Ile
				115			120				125				

Ile	Met	Glu	Phe	Gly	Gly	Asn	Val	Thr	Leu	His	Gln	Val	Ile	Tyr	Gly
				130			135				140				

Ala	Ala	Gly	His	Pro	Glu	Gly	Asp	Ala	Gly	Glu	Pro	His	Cys	Arg	Thr
				145		150				155			160		

Gly	Gly	Gln	Leu	Ser	Leu	Gly	Lys	Cys	Leu	Lys	Tyr	Ser	Leu	Asp	Val
				165				170			175				

199

Val Asn Gly Leu Leu Phe Leu His Ser Gln Ser Ile Val His Leu Asp
180 185 190

Leu Lys Pro Ala Asn Ile Leu Ile Ser Glu Gln Asp Val Cys Lys Ile
195 200 205

Ser Asp Phe Gly Cys Ser Glu Lys Leu Glu Asp Leu Leu Cys Phe Gln
210 215 220

Thr Pro Ser Tyr Pro Leu Gly Gly Thr Tyr Thr His Arg Ala Pro Glu
225 230 235 240

Leu Leu Lys Gly Glu Gly Val Thr Pro Lys Ala Asp Ile Tyr Ser Phe
245 250 255

Ala Ile Thr Leu Trp Gln Met Thr Thr Lys Gln Ala Pro Tyr Ser Gly
260 265 270

Glu Arg Gln His Ile Leu Tyr Ala Val Val Ala Tyr Asp Leu Arg Pro
275 280 285

Ser Leu Ser Ala Ala Val Phe Glu Asp Ser Leu Pro Gly Gln Arg Leu
290 295 300

Gly Asp Val Ile Gln Arg Cys Trp Arg Pro Ser Ala Ala Gln Arg Pro
305 310 315 320

Ser Ala Arg Leu Leu Leu Val Asp Leu Thr Ser Leu Lys Ala Glu Leu
325 330 335

Gly

<210> 159
<211> 362
<212> PRT
<213> Homo sapiens

<400> 159
Ser Gly Thr Ser Ser Pro Ser Thr Ser Pro Arg Ala Ser Asn His Ser
1 5 10 15

Leu Cys Ser Gly Ser Ser Ala Ser Lys Ala Gly Ser Ser Pro Ser Leu
20 25 30

Glu Gln Asp Asp Gly Asp Glu Glu Thr Ser Val Val Ile Val Gly Lys
35 40 45

Ile Ser Phe Cys Pro Lys Asp Val Leu Gly His Gly Ala Glu Gly Thr
50 55 60

Ile Val Tyr Arg Gly Met Phe Asp Asn Arg Asp Val Ala Val Lys Arg
65 70 75 80

Ile Leu Pro Glu Cys Phe Ser Phe Ala Asp Arg Glu Val Gln Leu Leu
85 90 95

200

Arg Glu Ser Asp Glu His Pro Asn Val Ile Arg Tyr Phe Cys Thr Glu
100 105 110

Lys Asp Arg Gln Phe Gln Tyr Ile Ala Ile Glu Leu Cys Ala Ala Thr
115 120 125

Leu Gln Glu Tyr Val Glu Gln Lys Asp Phe Ala His Leu Gly Leu Glu
130 135 140

Pro Ile Thr Leu Leu Gln Gln Thr Thr Ser Gly Leu Ala His Leu His
145 150 155 160

Ser Leu Asn Ile Val His Arg Asp Leu Lys Pro His Asn Ile Leu Ile
165 170 175

Ser Met Pro Asn Ala His Gly Lys Ile Lys Ala Met Ile Ser Asp Phe
180 185 190

Gly Leu Cys Lys Lys Leu Ala Val Gly Arg His Ser Phe Ser Arg Arg
195 200 205

Ser Gly Val Pro Gly Thr Glu Gly Trp Ile Ala Pro Glu Met Leu Ser
210 215 220

Glu Asp Cys Lys Glu Asn Pro Thr Tyr Thr Val Asp Ile Phe Ser Ala
225 230 235 240

Gly Cys Val Phe Tyr Tyr Val Val Ser Glu Gly Ser His Pro Phe Gly
245 250 255

Lys Ser Leu Gln Arg Gln Ala Asn Ile Leu Leu Gly Ala Cys Ser Leu
260 265 270

Asp Cys Leu His Pro Glu Lys His Glu Asp Val Ile Ala Arg Glu Leu
275 280 285

Ile Glu Lys Met Ile Ala Met Asp Pro Gln Lys Arg Pro Ser Ala Asn
290 295 300

Asp Val Leu Lys His Pro Phe Phe Trp Ser Leu Glu Lys Gln Leu Gln
305 310 315 320

Phe Phe Gln Asp Val Ser Asp Arg Ile Glu Lys Glu Ser Leu Asp Gly
325 330 335

Pro Ile Val Lys Gln Leu Glu Arg Gly Arg Ala Val Val Lys Met
340 345 350

Asp Trp Arg Glu Asn Ile Thr Asp Pro Leu
355 360

<210> 160

<211> 310

<212> PRT

<213> Homo sapiens

<400> 160
 Met Gly His Ala Leu Cys Val Cys Ser Arg Gly Thr Val Ile Ile Asp
 1 5 10 15

 Asn Lys Arg Tyr Leu Phe Ile Gln Lys Leu Gly Glu Gly Gly Phe Ser
 20 25 30

 Tyr Val Asp Leu Val Glu Gly Leu His Asp Gly His Phe Tyr Ala Leu
 35 40 45

 Lys Arg Ile Leu Cys His Glu Gln Asp Arg Glu Glu Ala Gln Arg
 50 55 60

 Glu Ala Asp Met His Arg Leu Phe Asn His Pro Asn Ile Leu Arg Leu
 65 70 75 80

 Val Ala Tyr Cys Leu Arg Glu Arg Gly Ala Lys His Glu Ala Trp Leu
 85 90 95

 Leu Leu Pro Phe Phe Lys Arg Gly Thr Leu Trp Asn Glu Ile Glu Arg
 100 105 110

 Leu Lys Asp Lys Gly Asn Phe Leu Thr Glu Asp Gln Ile Leu Trp Leu
 115 120 125

 Leu Leu Gly Ile Cys Arg Gly Leu Glu Ala Ile His Ala Lys Gly Tyr
 130 135 140

 Ala His Arg Asp Leu Lys Pro Thr Asn Ile Leu Leu Gly Asp Glu Gly
 145 150 155 160

 Gln Pro Val Leu Met Asp Leu Gly Ser Met Asn Gln Ala Cys Ile His
 165 170 175

 Val Glu Gly Ser Arg Gln Ala Leu Thr Leu Gln Asp Trp Ala Ala Gln
 180 185 190

 Arg Cys Thr Ile Ser Tyr Arg Ala Pro Glu Leu Phe Ser Val Gln Ser
 195 200 205

 His Cys Val Ile Gly Glu Arg Thr Asp Val Trp Ser Leu Gly Cys Val
 210 215 220

 Leu Tyr Ala Met Met Phe Gly Glu Gly Pro Tyr Asp Met Val Phe Gln
 225 230 235 240

 Lys Gly Asp Ser Val Ala Leu Ala Val Gln Asn Gln Leu Ser Ile Pro
 245 250 255

 Gln Ser Pro Arg His Ser Ser Ala Leu Arg Gln Leu Leu Asn Ser Met
 260 265 270

 Met Thr Val Asp Pro His Gln Arg Pro His Ile Pro Leu Leu Leu Ser
 275 280 285

 Gln Leu Glu Ala Leu Gln Pro Pro Ala Pro Gly Gln His Thr Thr Gln
 290 295 300

Ile Glu Lys Ala Ala Cys
305 310

<210> 161
<211> 365
<212> PRT
<213> Homo sapiens

<400> 161
Met Ser Leu Leu Gln Ser Ala Leu Asp Phe Leu Ala Gly Pro Gly Ser
1 5 10 15

Leu Gly Gly Ala Ser Gly Arg Asp Gln Ser Asp Phe Val Gly Gln Thr
20 25 30

Val Glu Leu Gly Glu Leu Arg Leu Arg Val Arg Arg Val Leu Ala Glu
35 40 45

Gly Gly Phe Ala Phe Val Tyr Glu Ala Gln Asp Val Gly Ser Gly Arg
50 55 60

Glu Tyr Ala Leu Lys Arg Leu Leu Ser Asn Glu Glu Lys Asn Arg
65 70 75 80

Ala Ile Ile Gln Glu Val Cys Phe Met Lys Lys Leu Ser Gly His Pro
85 90 95

Asn Ile Val Gln Phe Cys Ser Ala Ala Ser Ile Gly Lys Glu Glu Ser
100 105 110

Asp Thr Gly Gln Ala Glu Phe Leu Leu Leu Thr Glu Leu Cys Lys Gly
115 120 125

Gln Leu Val Glu Phe Leu Lys Lys Met Glu Ser Arg Gly Pro Leu Ser
130 135 140

Cys Asp Thr Val Leu Lys Ile Phe Tyr Gln Thr Cys Arg Ala Val Gln
145 150 155 160

His Met His Arg Gln Lys Pro Pro Ile Ile His Arg Asp Leu Lys Val
165 170 175

Glu Asn Leu Leu Leu Ser Asn Gln Gly Thr Ile Lys Leu Cys Asp Phe
180 185 190

Gly Ser Ala Thr Thr Ile Ser His Tyr Pro Asp Tyr Ser Trp Ser Ala
195 200 205

Gln Arg Arg Ala Leu Val Glu Glu Ile Thr Arg Asn Thr Thr Pro
210 215 220

Met Tyr Arg Thr Pro Glu Ile Ile Asp Leu Tyr Ser Asn Phe Pro Ile
225 230 235 240

Gly Glu Lys Gln Asp Ile Trp Ala Leu Gly Cys Ile Leu Tyr Leu Leu
245 250 255

Cys Phe Arg Gln His Pro Phe Glu Asp Gly Ala Lys Leu Arg Ile Val
 260 265 270
 Asn Gly Lys Tyr Ser Ile Pro Pro His Asp Thr Gln Tyr Thr Val Phe
 275 280 285
 His Ser Leu Ile Arg Ala Met Leu Gln Val Asn Pro Glu Glu Arg Leu
 290 295 300
 Ser Ile Ala Glu Val Val His Gln Leu Gln Glu Ile Ala Ala Ala Arg
 305 310 315 320
 Asn Val Asn Pro Lys Ser Pro Ile Thr Glu Leu Leu Glu Gln Asn Gly
 325 330 335
 Gly Tyr Gly Ser Ala Thr Leu Ser Arg Gly Pro Pro Pro Val Gly
 340 345 350
 Pro Ala Gly Ser Gly Tyr Ser Gly Gly Leu Ala Leu Ala
 355 360 365

 <210> 162
 <211> 355
 <212> PRT
 <213> Homo sapiens

 <400> 162
 Met Lys Lys Phe Ser Arg Met Pro Lys Ser Glu Gly Gly Ser Gly Gly
 1 5 10 15
 Gly Ala Ala Gly Gly Ala Gly Gly Ala Gly Ala Gly Ala Gly Cys
 20 25 30
 Gly Ser Gly Gly Ser Ser Val Gly Val Arg Val Phe Ala Val Gly Arg
 35 40 45
 His Gln Val Thr Leu Glu Glu Ser Leu Ala Glu Gly Gly Phe Ser Thr
 50 55 60
 Val Phe Leu Val Arg Thr His Gly Gly Ile Arg Cys Ala Leu Lys Arg
 65 70 75 80
 Met Tyr Val Asn Asn Met Pro Asp Leu Asn Val Cys Lys Arg Glu Ile
 85 90 95
 Thr Ile Met Lys Glu Leu Ser Gly His Lys Asn Ile Val Gly Tyr Leu
 100 105 110
 Asp Cys Ala Val Asn Ser Ile Ser Asp Asn Val Trp Glu Val Leu Ile
 115 120 125
 Leu Met Glu Tyr Cys Arg Ala Gly Gln Val Val Asn Gln Met Asn Lys
 130 135 140
 Lys Leu Gln Thr Gly Phe Thr Glu Pro Glu Val Leu Gln Ile Phe Cys
 145 150 155 160

Asp Thr Cys Glu Ala Val Ala Arg Leu His Gln Cys Lys Thr Pro Ile
 165 170 175
 Ile His Arg Asp Leu Lys Val Glu Asn Ile Leu Leu Asn Asp Gly Gly
 180 185 190
 Asn Tyr Val Leu Cys Asp Phe Gly Ser Ala Thr Asn Lys Phe Leu Asn
 195 200 205
 Pro Gln Lys Asp Gly Val Asn Val Val Glu Glu Glu Ile Lys Lys Tyr
 210 215 220
 Thr Thr Leu Ser Tyr Arg Ala Pro Glu Met Ile Asn Leu Tyr Gly Gly
 225 230 235 240
 Lys Pro Ile Thr Thr Lys Ala Asp Ile Trp Ala Leu Gly Cys Leu Leu
 245 250 255
 Tyr Lys Leu Cys Phe Phe Thr Leu Pro Phe Gly Glu Ser Gln Val Ala
 260 265 270
 Ile Cys Asp Gly Asn Phe Thr Ile Pro Asp Asn Ser Arg Tyr Ser Arg
 275 280 285
 Asn Ile His Cys Leu Ile Arg Phe Met Leu Glu Pro Asp Pro Glu His
 290 295 300
 Arg Pro Asp Ile Phe Gln Val Ser Tyr Phe Ala Phe Lys Phe Ala Lys
 305 310 315 320
 Lys Asp Cys Pro Val Ser Asn Ile Asn Lys Cys Cys Lys Gln Leu Leu
 325 330 335
 Arg His Gly Ala Leu Leu Thr Glu Ile Leu Leu Phe Leu Gln Leu Phe
 340 345 350
 Leu Asn Arg
 355

```

<210> 163
<211> 322
<212> PRT
<213> Homo sapiens

<400> 163
Met Glu Gly Ile Ser Asn Phe Lys Thr Pro Ser Lys Leu Ser Glu Lys
      1           5           10          15

Lys Lys Ser Val Leu Cys Ser Thr Pro Thr Ile Asn Ile Pro Ala Ser
      20          25          30

Pro Phe Met Gln Lys Leu Gly Phe Gly Thr Gly Val Asn Val Tyr Leu
      35          40          45

Met Lys Arg Ser Pro Arg Gly Leu Ser His Ser Pro Trp Ala Val Lys
      50          55          60

```

205

Lys Ile Asn Pro Ile Cys Asn Asp His Tyr Arg Ser Val Tyr Gln Lys
65 70 75 80

Arg Leu Met Asp Glu Ala Lys Ile Leu Lys Ser Leu His His Pro Asn
85 90 95

Ile Val Gly Tyr Arg Ala Phe Thr Glu Ala Asn Asp Gly Ser Leu Cys
100 105 110

Leu Ala Met Glu Tyr Gly Gly Glu Lys Ser Leu Asn Asp Leu Ile Glu
115 120 125

Glu Arg Tyr Lys Ala Ser Gln Asp Pro Phe Pro Ala Ala Ile Ile Leu
130 135 140

Lys Val Ala Leu Asn Met Ala Arg Gly Leu Lys Tyr Leu His Gln Glu
145 150 155 160

Lys Lys Leu Leu His Gly Asp Ile Lys Ser Ser Asn Val Val Ile Lys
165 170 175

Gly Asp Phe Glu Thr Ile Lys Ile Cys Asp Val Gly Val Ser Leu Pro
180 185 190

Leu Asp Glu Asn Met Thr Val Thr Asp Pro Glu Ala Cys Tyr Ile Gly
195 200 205

Thr Glu Pro Trp Lys Pro Lys Glu Ala Val Glu Glu Asn Gly Val Ile
210 215 220

Thr Asp Lys Ala Asp Ile Phe Ala Phe Gly Leu Thr Leu Trp Glu Met
225 230 235 240

Met Thr Leu Ser Ile Pro His Ile Asn Leu Ser Asn Asp Asp Asp Asp
245 250 255

Glu Asp Lys Thr Phe Asp Glu Ser Asp Phe Asp Asp Glu Ala Tyr Tyr
260 265 270

Ala Ala Leu Gly Thr Arg Pro Pro Ile Asn Met Glu Glu Leu Asp Glu
275 280 285

Ser Tyr Gln Lys Val Ile Glu Leu Phe Ser Val Cys Thr Asn Glu Asp
290 295 300

Pro Lys Asp Arg Pro Ser Ala Ala His Ile Val Glu Ala Leu Glu Thr
305 310 315 320

Asp Val

<210> 164
<211> 310
<212> PRT
<213> Homo sapiens

<400> 164
 Pro Leu Arg Glu Leu Leu Arg Glu Arg Ala Glu Lys Met Gly Gln Asn
 1 5 10 15
 Leu Asn Arg Ile Pro Tyr Lys Asp Thr Phe Trp Lys Gly Thr Thr Arg
 20 25 30
 Thr Arg Pro Arg Asn Gly Thr Leu Asn Lys His Ser Gly Ile Asp Phe
 35 40 45
 Lys Gln Leu Asn Phe Leu Thr Lys Leu Asn Glu Asn His Ser Gly Glu
 50 55 60
 Leu Trp Lys Gly Arg Trp Gln Gly Asn Asp Ile Val Val Lys Val Leu
 65 70 75 80
 Lys Val Arg Asp Trp Ser Thr Arg Lys Ser Arg Asp Phe Asn Glu Glu
 85 90 95
 Cys Pro Arg Leu Arg Ile Phe Ser His Pro Asn Val Leu Pro Val Leu
 100 105 110
 Gly Ala Cys Gln Ser Pro Pro Ala Pro His Pro Thr Leu Ile Thr His
 115 120 125
 Trp Met Pro Tyr Gly Ser Leu Tyr Asn Val Leu His Glu Gly Thr Asn
 130 135 140
 Phe Val Val Asp Gln Ser Gln Ala Val Lys Phe Ala Leu Asp Met Ala
 145 150 155 160
 Arg Gly Met Ala Phe Leu His Thr Leu Glu Pro Leu Ile Pro Arg His
 165 170 175
 Ala Leu Asn Ser Arg Ser Val Met Ile Asp Glu Asp Met Thr Ala Arg
 180 185 190
 Ile Ser Met Ala Asp Val Lys Phe Ser Phe Gln Cys Pro Gly Arg Met
 195 200 205
 Tyr Ala Pro Ala Trp Val Ala Pro Glu Ala Leu Gln Lys Lys Pro Glu
 210 215 220
 Asp Thr Asn Arg Arg Ser Ala Asp Met Trp Ser Phe Ala Val Leu Leu
 225 230 235 240
 Trp Glu Leu Val Thr Arg Glu Val Pro Phe Ala Asp Leu Ser Asn Met
 245 250 255
 Glu Ile Gly Met Lys Val Ala Leu Glu Gly Leu Arg Pro Thr Ile Pro
 260 265 270
 Pro Gly Ile Ser Pro His Val Cys Lys Leu Met Lys Ile Cys Met Asn
 275 280 285
 Glu Asp Pro Ala Lys Arg Pro Lys Phe Asp Met Ile Val Pro Ile Leu
 290 295 300

Glu Lys Met Gln Asp Lys
 305 310

<210> 165
 <211> 981
 <212> DNA
 <213> Homo sapiens

<400> 165
 atgctgctct ccaagttcggttccctggcg cacctctcg ggcggcggcgg cgtggaccac 60
 ctcccggtga agatcctgca gccaggcaag gcggacaagg agagcttcga gaaggcgatc 120
 cagggtggcg ccgtgctggg tagcggcggc ttccggcacgg tctacggcggg tagccgcac 180
 gcccacgggc tcccggtggc tgtgaagcac gtggtaagg agcgggtgac cgagtggggc 240
 agcggcggcg ggcggacccgt gccccctggag gtgggtctgc tgcccaagggt gggcggcggc 300
 ggcggcggcgc gggcgcatc ccgcctgtcg gactgggtcg agcggcccgaa cggcttcctg 360
 ctgggtctgg agcggcccgaa gcccggcgcg gaccccttcg actttatcac ggagcgcggc 420
 gcccctggacg agccgcgtggc gcccggcttc ttccggcagg tgctggccgc cgtgcgcac 480
 tgccacagct gcccggctgt gcaccggcgcg attaaggacaaaatctgct tggggacctg 540
 cgctccggag agctcaagct catcgacttc gtttcgggtcg cgctgctcaa ggacacggc 600
 tacaccgact tcgacggcgc ac ccgagtgatc agcccccccg agtggatccg ctaccaccgc 660
 taccacgggc gctcggccac cgtgtggtcg ctggggcgtgc ttctctacga tatgggttgt 720
 gggggacatcc ctttcgagca ggacgaggag atccctccgag gcccggctgc cttccggagg 780
 aggggtctctc cagagtgcgcg gcagctgatc cgggtggtgcc tggggctgcg gcccctcagag 840
 cggccggcgc tggatcagat tgcggccat ccctggatgc tggggctga cggggggcgc 900
 ccggagagact gtgacctgcg gctgtgcacc ctgcggccctg atgacgtggc cagcaccacg 960
 tccagcagcg agagcttgcg a 981

<210> 166
 <211> 326
 <212> PRT
 <213> Homo sapiens

<400> 166
 Met Leu Leu Ser Lys Phe Gly Ser Leu Ala His Leu Cys Gly Pro Gly
 1 5 10 15
 Gly Val Asp His Leu Pro Val Lys Ile Leu Gln Pro Ala Lys Ala Asp
 20 25 30
 Lys Glu Ser Phe Glu Lys Ala Tyr Gln Val Gly Ala Val Leu Gly Ser
 35 40 45
 Gly Gly Phe Gly Thr Val Tyr Ala Gly Ser Arg Ile Ala Asp Gly Leu
 50 55 60
 Pro Val Ala Val Lys His Val Val Lys Glu Arg Val Thr Glu Trp Gly
 65 70 75 80
 Ser Leu Gly Gly Ala Thr Val Pro Leu Glu Val Val Leu Leu Arg Lys
 85 90 95
 Val Gly Ala Ala Gly Gly Ala Arg Gly Val Ile Arg Leu Leu Asp Trp
 100 105 110
 Phe Glu Arg Pro Asp Gly Phe Leu Leu Val Leu Glu Arg Pro Glu Pro
 115 120 125

Ala Gln Asp Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu Asp Glu
 130 135 140

Pro Leu Ala Arg Arg Phe Phe Ala Gln Val Leu Ala Ala Val Arg His
 145 150 155 160

Cys His Ser Cys Gly Val Val His Arg Asp Ile Lys Asp Glu Asn Leu
 165 170 175

Leu Val Asp Leu Arg Ser Gly Glu Leu Lys Leu Ile Asp Phe Gly Ser
 180 185 190

Gly Ala Leu Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr Arg
 195 200 205

Val Tyr Ser Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly Arg
 210 215 220

Ser Ala Thr Val Trp Ser Leu Gly Val Leu Leu Tyr Asp Met Val Cys
 225 230 235 240

Gly Asp Ile Pro Phe Glu Gln Asp Glu Glu Ile Leu Arg Gly Arg Leu
 245 250 255

Leu Phe Arg Arg Arg Val Ser Pro Glu Cys Gln Gln Leu Ile Arg Trp
 260 265 270

Cys Leu Ser Leu Arg Pro Ser Glu Arg Pro Ser Leu Asp Gln Ile Ala
 275 280 285

Ala His Pro Trp Met Leu Gly Ala Asp Gly Gly Ala Pro Glu Ser Cys
 290 295 300

Asp Leu Arg Leu Cys Thr Leu Glu Pro Asp Asp Val Ala Ser Thr Thr
 305 310 315 320

Ser Ser Ser Glu Ser Leu
 325

<210> 167

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
6-His tag

<400> 167

His His His His His
1 5

<210> 168
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 168
gcagccacat atggcggaca aggagagctt cgag

34

<210> 169
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 169
tgcagcgtcg accaagctct cgctgctgga cgtg

34

<210> 170
<211> 374
<212> PRT
<213> Homo sapiens

<400> 170
Gln Gln Lys Leu Ser Ser Thr Trp Glu Thr Gly Lys Thr Arg Lys Leu
1 5 10 15

Met Glu Phe Ser Glu His Cys Ala Ile Ile Leu Glu Asp Asp Arg Ser
20 25 30

Asp Ile Ser Ser Thr Cys Ala Asn Asn Ile Asn His Asn Thr Glu Leu
35 40 45

Leu Pro Ile Glu Leu Asp Thr Leu Val Gly Lys Gly Arg Phe Ala Glu
50 55 60

Val Tyr Lys Ala Lys Leu Lys Gln Asn Thr Ser Glu Gln Phe Glu Thr
65 70 75 80

Val Ala Val Lys Ile Phe Pro Tyr Glu Glu Tyr Ala Ser Trp Lys Thr
85 90 95

Glu Lys Asp Ile Phe Ser Asp Ile Asn Leu Lys His Glu Asn Ile Leu
100 105 110

Gln Phe Leu Thr Ala Glu Glu Arg Lys Thr Glu Leu Gly Lys Gln Tyr
115 120 125

Trp Leu Ile Thr Ala Phe His Ala Lys Gly Asn Leu Gln Glu Tyr Leu
130 135 140

Thr Arg His Val Ile Ser Trp Glu Asp Leu Arg Lys Leu Gly Ser Ser
 145 150 155 160
 Leu Ala Arg Gly Ile Ala His Leu His Ser Asp His Thr Pro Cys Gly
 165 170 175
 Arg Pro Lys Met Pro Ile Val His Arg Asp Leu Lys Ser Ser Asn Ile
 180 185 190
 Leu Val Lys Asn Asp Leu Thr Cys Cys Leu Cys Asp Phe Gly Leu Ser
 195 200 205
 Leu Arg Leu Asp Pro Thr Leu Ser Val Asp Asp Leu Ala Asn Ser Gly
 210 215 220
 Gln Val Gly Thr Ala Arg Tyr Met Ala Pro Glu Val Leu Glu Ser Arg
 225 230 235 240
 Met Asn Leu Glu Asn Ala Glu Ser Phe Lys Gln Thr Asp Val Tyr Ser
 245 250 255
 Met Ala Leu Val Leu Trp Glu Met Thr Ser Arg Cys Asn Ala Val Gly
 260 265 270
 Glu Val Lys Asp Tyr Glu Pro Pro Phe Gly Ser Lys Val Arg Glu His
 275 280 285
 Pro Cys Val Glu Ser Met Lys Asp Asn Val Leu Arg Asp Arg Gly Arg
 290 295 300
 Pro Glu Ile Pro Ser Phe Trp Leu Asn His Gln Gly Ile Gln Met Val
 305 310 315 320
 Cys Glu Thr Leu Thr Glu Cys Trp Asp His Asp Pro Glu Ala Arg Leu
 325 330 335
 Thr Ala Gln Cys Val Ala Glu Arg Phe Ser Glu Leu Glu His Leu Asp
 340 345 350
 Arg Leu Ser Gly Arg Ser Cys Ser Glu Glu Lys Ile Pro Glu Asp Gly
 355 360 365
 Ser Leu Asn Thr Thr Lys
 370

<210> 171
 <211> 325
 <212> PRT
 <213> Homo sapiens

<400> 171
 Met Thr Val Phe Arg Gln Glu Asn Val Asp Asp Tyr Tyr Asp Thr Gly
 1 5 10 15
 Glu Glu Leu Gly Ser Gly Gln Phe Ala Val Val Lys Lys Cys Arg Glu
 20 25 30

Lys Ser Thr Gly Leu Gln Tyr Ala Ala Lys Phe Ile Lys Lys Arg Arg
 35 40 45
 Thr Lys Ser Ser Arg Arg Gly Val Ser Arg Glu Asp Ile Glu Arg Glu
 50 55 60
 Val Ser Ile Leu Lys Glu Ile Gln His Pro Asn Val Ile Thr Leu His
 65 70 75 80
 Glu Val Tyr Glu Asn Lys Thr Asp Val Ile Leu Ile Leu Glu Leu Val
 85 90 95
 Ala Gly Gly Glu Leu Phe Asp Phe Leu Ala Glu Lys Glu Ser Leu Thr
 100 105 110
 Glu Glu Glu Ala Thr Glu Phe Leu Lys Gln Ile Leu Asn Gly Val Tyr
 115 120 125
 Tyr Leu His Ser Leu Gln Ile Ala His Phe Asp Leu Lys Pro Glu Asn
 130 135 140
 Ile Met Leu Leu Asp Arg Asn Val Pro Lys Pro Arg Ile Lys Ile Ile
 145 150 155 160
 Asp Phe Gly Leu Ala His Lys Ile Asp Phe Gly Asn Glu Phe Lys Asn
 165 170 175
 Ile Phe Gly Thr Pro Glu Phe Val Ala Pro Glu Ile Val Asn Tyr Glu
 180 185 190
 Pro Leu Gly Leu Glu Ala Asp Met Trp Ser Ile Gly Val Ile Thr Tyr
 195 200 205
 Ile Leu Leu Ser Gly Ala Ser Pro Phe Leu Gly Asp Thr Lys Gln Glu
 210 215 220
 Thr Leu Ala Asn Val Ser Ala Val Asn Tyr Glu Phe Glu Asp Glu Tyr
 225 230 235 240
 Phe Ser Asn Thr Ser Ala Leu Ala Lys Asp Phe Ile Arg Arg Leu Leu
 245 250 255
 Val Lys Asp Pro Lys Lys Arg Met Thr Ile Gln Asp Ser Leu Gln His
 260 265 270
 Pro Trp Ile Lys Pro Lys Asp Thr Gln Gln Ala Leu Ser Arg Lys Ala
 275 280 285
 Ser Ala Val Asn Met Glu Lys Phe Lys Lys Phe Ala Ala Arg Lys Lys
 290 295 300
 Trp Lys Gln Ser Val Arg Leu Ile Ser Leu Cys Gln Arg Leu Ser Arg
 305 310 315 320
 Ser Phe Leu Ser Arg
 325

<210> 172
 <211> 274
 <212> PRT
 <213> Homo sapiens

<400> 172
 Pro Leu Glu Ser Gln Tyr Gln Val Gly Pro Leu Leu Gly Ser Gly Gly
 1 5 10 15

Phe Gly Ser Val Tyr Ser Gly Ile Arg Val Ser Asp Asn Leu Pro Val
 20 25 30

Ala Ile Lys His Val Glu Lys Asp Arg Ile Ser Asp Trp Gly Glu Leu
 35 40 45

Pro Asn Gly Thr Arg Val Pro Met Glu Val Val Leu Leu Lys Lys Val
 50 55 60

Ser Ser Gly Phe Ser Gly Val Ile Arg Leu Leu Asp Trp Phe Glu Arg
 65 70 75 80

Pro Asp Ser Phe Val Leu Ile Leu Glu Arg Pro Glu Pro Val Gln Asp
 85 90 95

Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu Gln Glu Glu Leu Ala
 100 105 110

Arg Ser Phe Phe Trp Gln Val Leu Glu Ala Val Arg His Cys His Asn
 115 120 125

Cys Gly Val Leu His Arg Asp Ile Lys Asp Glu Asn Ile Leu Ile Asp
 130 135 140

Leu Asn Arg Gly Glu Leu Lys Leu Ile Asp Phe Gly Ser Gly Ala Leu
 145 150 155 160

Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr Arg Val Tyr Ser
 165 170 175

Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly Arg Ser Ala Ala
 180 185 190

Val Trp Ser Leu Gly Ile Leu Leu Tyr Asp Met Val Cys Gly Asp Ile
 195 200 205

Pro Phe Glu His Asp Glu Glu Ile Ile Arg Gly Gln Val Phe Phe Arg
 210 215 220

Gln Arg Val Ser Ser Glu Cys Gln His Leu Ile Arg Trp Cys Leu Ala
 225 230 235 240

Leu Arg Pro Ser Asp Arg Pro Thr Phe Glu Glu Ile Gln Asn His Pro
 245 250 255

Trp Met Gln Asp Val Leu Leu Pro Gln Glu Thr Ala Glu Ile His Leu
 260 265 270

His Ser

<210> 173
 <211> 285
 <212> PRT
 <213> Homo sapiens

<400> 173
 Lys Glu Lys Glu Pro Leu Glu Ser Gln Tyr Gln Val Gly Pro Leu Leu
 1 5 10 15
 Gly Ser Gly Gly Phe Gly Ser Val Tyr Ser Gly Ile Arg Val Ser Asp
 20 25 30
 Asn Leu Pro Val Ala Ile Lys His Val Glu Lys Asp Arg Ile Ser Asp
 35 40 45
 Trp Gly Glu Leu Pro Asn Gly Thr Arg Val Pro Met Glu Val Val Leu
 50 55 60
 Leu Lys Lys Val Ser Ser Gly Phe Ser Gly Val Ile Arg Leu Leu Asp
 65 70 75 80
 Trp Phe Glu Arg Pro Asp Ser Phe Val Leu Ile Leu Glu Arg Pro Glu
 85 90 95
 Pro Val Gln Asp Leu Phe Asp Phe Ile Thr Glu Arg Gly Ala Leu Gln
 100 105 110
 Glu Glu Leu Ala Arg Ser Phe Phe Trp Gln Val Leu Glu Ala Val Arg
 115 120 125
 His Cys His Asn Cys Gly Val Leu His Arg Asp Ile Lys Asp Glu Asn
 130 135 140
 Ile Leu Ile Asp Leu Asn Arg Gly Glu Leu Lys Leu Ile Asp Phe Gly
 145 150 155 160
 Ser Gly Ala Leu Leu Lys Asp Thr Val Tyr Thr Asp Phe Asp Gly Thr
 165 170 175
 Arg Val Tyr Ser Pro Pro Glu Trp Ile Arg Tyr His Arg Tyr His Gly
 180 185 190
 Arg Ser Ala Ala Val Trp Ser Leu Gly Ile Leu Leu Tyr Asp Met Val
 195 200 205
 Cys Gly Asp Ile Pro Phe Glu His Asp Glu Glu Ile Ile Arg Gly Gln
 210 215 220
 Val Phe Phe Arg Gln Arg Val Ser Ser Glu Cys Gln His Leu Ile Arg
 225 230 235 240
 Trp Cys Leu Ala Leu Arg Pro Ser Asp Arg Pro Thr Phe Glu Glu Ile
 245 250 255

214

Gln Asn His Pro Trp Met Gln Asp Val Leu Leu Pro Gln Glu Thr Ala
260 265 270

Glu Ile His Leu His Ser Leu Ser Pro Gly Pro Ser Lys
275 280 285